

**Steven E. Nissen, M.D.**

**CURRICULUM VITA**

**Address:**

Cleveland Clinic Foundation

Department of Cardiovascular Medicine  
Desk F 15  
9500 Euclid Ave,  
Cleveland, OH 44195

**Undergraduate Education:**

University of Michigan, B.G.S.  
Ann Arbor, Michigan

**Medical Education:**

University of Michigan School of Medicine, MD  
Ann Arbor, Michigan

**Undergraduate Honors:**

Angell Scholar - University of Michigan  
Sphinx Junior Men's Honorary Society

**Internship: Internal Medicine**

University of California, Davis  
Sacramento, California

**Residency: Internal Medicine**

University of California, Davis  
Sacramento, California

President, Resident Medical Staff  
University of California, Davis

**Cardiology Fellowship:**

University of Kentucky Medical Center  
Lexington, Kentucky

**Certification:**

National Board of Medical Examiners  
American Board of Internal Medicine

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Cardiovascular Medicine,  
American Board of Internal Medicine

**Professional and Academic Appointments:**

2001 – Present	Medical Director, Cleveland Clinic Cardiovascular Coordinating Center (C5)
1993 - Present	Vice-Chairman Department of Cardiology Cleveland Clinic Foundation
1994 – 2001	Professor of Medicine Cleveland Clinic Division of Ohio State University
1992 - 2000	Section Head - Clinical Cardiology Cleveland Clinic Foundation
1992 - 1997	Director, Coronary Intensive Care Unit Cleveland Clinic Foundation
1988 - 1992	Associate Professor of Medicine University of Kentucky College of Medicine
1984 - 1988	Assistant Professor of Medicine University of Kentucky College of Medicine
1983 - 1984	Instructor in Medicine, Division of Cardiology University of Kentucky College of Medicine

**Teaching Awards:**

1998	Outstanding Teacher Award Presented by Cardiology Fellows Cleveland Clinic Foundation
1993	Outstanding Teacher Award Presented by Cardiology Fellows Cleveland Clinic Foundation

**Licensure:**

Ohio  
Kentucky - (inactive)  
California - (inactive)

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**Professional Societies:**

American College of Cardiology  
American Heart Association  
AHA Council on Cardiovascular Radiology  
Elected Fellow 1991  
AHA Council on Clinical Cardiology  
Laennec Society  
American Society of Echocardiography

**Committees (local):**

1994 - Present	Cardiology/Emergency Medical Services Liaison Committee Cleveland Clinic Foundation
1993 - 1999	Medical/Legal Committee Cleveland Clinic Foundation
1993 - 1996	Program Co-director, Internal Medicine Residency Cleveland Clinic Foundation
1993 - 1994	Search Committee for Chairman of the Department of Biostatistics and Epidemiology Cleveland Clinic Foundation
1992 - 1996	Pharmacy and Therapeutics Committee Cleveland Clinic Foundation
1992 - 1998	Chairman, Quality Assurance Committee Department of Cardiology Cleveland Clinic Foundation
1992 - Present	Cardiac Utilization Team Cleveland Clinic Foundation
1991 - 1992	Search Committee, Director of Nursing University of Kentucky Medical Center
1991 - 1992	Departmental Review and Search Committee, Department of Pediatrics University of Kentucky College of Medicine
1990 - 1992	Physician Referral Advisory Committee University of Kentucky Medical Center

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1987 - 1992	Aeromedical Patient Care Committee, University of Kentucky Medical Center
1987 - 1992 1989 - 1992	Product Evaluation Committee, Committee Chairman Product Evaluation Committee University of Kentucky Medical Center
1989 - 1992	Ad Hoc Committee for Nurse Retention and Recruitment University of Kentucky Medical Center
1983 - 1992 1989 - 1992	Intensive Care Units Committee, Associate Chairman University of Kentucky Medical Center
1986 - 1992	Emergency Medical Services Patient Care Committee, University of Kentucky Medical Center
1986 - 1992	Helicopter Transport Task Force, University of Kentucky Medical Center
1989	Chairman, Search Committee, Director - Department of Emergency Medicine, University of Kentucky Medical College of Medicine
1987 - 1988	Search Committee for Director of Magnetic Resonance Imaging and Spectroscopy Center, University of Kentucky College of Medicine
1980 - 1981	Dean's Ad Hoc Planning Committee University of California, Davis
1981	Hospital Executive Committee University of California, Davis Ex-Officio

**Committees (National):**

2002 - 2005	Budget, Finance and Investment Committee, American College of Cardiology
2001 - present	Member Editorial Board ACCArduino Development Project Interim Associate Editor for Images and Journals American College of Cardiology

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2001	Member Task Force on Workforce: Working Group on the Role of Technology to Enhance Efficiency and Productivity American College of Cardiology
2001 - Present	Education Strategic Directions Committee American College of Cardiology
2001 - Present	Education Strategic Directions Working Group on Products American College of Cardiology
2001-2002	Member, Task Force To Select the Cardiosource Editor-in-Chief American College of Cardiology
2002	Board of Trustees Working Group on Compensation and Honoraria American College of Cardiology
2000 - 2004	Cardio-Renal Advisory Panel, U.S. Food and Drug Administration Department of Health and Human Resources
2000 - 2002	Member Program Committee, ACCIS Program, ACC Interventional Symposium American College of Cardiology
2000 - 2002	Program Committee, Annual Scientific Sessions American College of Cardiology
2000 - Present	Editor-in-Chief Catheterization and Cardiovascular Interventions Self Assessment Program (CATH SAP II) American College of Cardiology
2000 - Present	ACCEL (American College of Cardiology Extended Learning) Editorial Board American College of Cardiology
2000	Task Force to Determine Honoraria for Officers and Editors American College of Cardiology
1999 - 2001	Committee Member KDE Content and Functional Advisory Group American College of Cardiology/American Heart Association
1999 - 2000	Nominating Committee American College of Cardiology

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1998 - 2000	Task Force on Strategic Directions for Continuing Medical Education American College of Cardiology Chairman, "Just in Time" CME Subcommittee
1993 - Present	Associate Editor, Member of Editorial Board ACCEL Audio Tape Series American College of Cardiology
1998 - 2001	Co-Chairman, Writing Group, Standards for the Acquisition, Measurement, and Reporting of Intravascular Ultrasound Studies Joint Committee of the American College of Cardiology and European Society of Cardiology
1992 - 2000	Co-Chairman, Digital Imaging and Communication for Medicine (DICOM) Working Group I, Task Force of the American College of Cardiology and National Electronics Manufacturers Association (NEMA) to Develop Standards for Digital Image Archiving Devices for Cardiac Catheterization Laboratories.
1998 - 1999	Electronic Publishing Committee American College of Cardiology
1997 - Present	Educational Products Committee American College of Cardiology
1996 - 2001	Information Technology Committee American College of Cardiology
1996 - 2001	Elected Member, Board of Trustees, American College of Cardiology
1995 - Present	Vascular Lesions Committee Council on Clinical Cardiology American Heart Association
1996 - 1999	Committee to Develop Cardiac Catheterization and Interventional Self-Assessment Program (CATH-SAP) Associate Editor American College of Cardiology
1995 - 1998	Committee to Revise the Angiography Guidelines Joint Committee of the American Heart association and American College of Cardiology

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1995 - 1996	Editor, CD-ROM Highlights of the ACC Scientific Sessions American College of Cardiology
1994 - 1997	Committee on Echocardiography Council on Clinical Cardiology American Heart Association
1993 - 1997	Committee to Develop CD-ROM Version of the American College of Cardiology Self-Assessment Program (ACC-SAP) American College of Cardiology
1994 - 1997	Cardiac Catheterization Committee, Appointed Member
1991 - 1994	Ex-Officio Liaison from Cardiac Imaging Committee American College of Cardiology
1993 - 1996	Committee on New Imaging Modalities Council on Cardiovascular Radiology American Heart Association
1993 - 1995	Committee to Standardize Nomenclature for Intravascular and Intracardiac Ultrasound American Society of Echocardiography
1993 - 1994	Technology Assessment Committee, American College of Cardiology
1991 - 1992	Governor, State of Kentucky Council on Clinical Cardiology, American Heart Association
1994 - 1997	Committee on Cardiovascular Imaging Ex-Officio Liaison from Cardiac Catheterization Committee
1988 - 1994	Appointed Member American College of Cardiology
1989 - 1993	Committee to Develop Self-Study Materials for Sub-Specialty Re-Certification, American College of Cardiology
1988 - 1989	Co-Chairman, Annual Scientific Sessions Program Committee, 38 <sup>th</sup> Annual Scientific Session, American College of Cardiology
1988 - 1990	Member, Annual Scientific Sessions Program Committee American College of Cardiology

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**Editorial Boards:**

1989 - Present	International Journal of Cardiac Imaging
1992 - Present	Cleveland Clinic Journal of Medicine
1993 - Present	Associate Editor, ACCEL Audio Tape Series
1993 - Present	Noninvasive Cardiology
1996 - Present	Intravascular Imaging
1997 - Present	Cardiology Today
1997 - Present	Intravascular Imaging
1997 - Present	International Journal of Cardiac Imaging
1998 - Present	Clinical Cardiology
2000 - Present	Catheterization and Cardiovascular Interventions
2001 - Present	Journal of the American College of Cardiology

**Service to Editorial Boards:**

American Heart Journal  
American Journal of Cardiology  
Annals of Internal Medicine  
Atherosclerosis  
Catheterization and Cardiovascular Diagnosis  
Circulation  
Coronary Artery Disease  
Journal of the American Society of Echocardiography  
Japanese Circulation Journal  
Journal of Clinical Ultrasound  
Journal of American College of Cardiology  
New England Journal of Medicine

**Visiting Professorships/Grand Rounds Programs:**

1983	SUNY - Downstate Long Island Jewish Hospital, Long Island
1986	Marshall University School of Medicine, Huntington, West Virginia
1986	Medical University of South Carolina, Charleston, South Carolina
1987	University of North Dakota, Fargo, North Dakota
1990	University of Pisa, Center for Cardiovascular Physiology, Pisa Italy
1990	University of Texas, San Antonio, Texas
1990	Loma Linda University, Riverside, California
1991	University of Minnesota, Minneapolis, Minnesota
1991	Bowman-Gray University, Winston-Salem, North Carolina
1991	New England Deaconess Hospital, Harvard Medical School, Boston MA



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1992 Frankfurt University Hospital, Frankfurt Germany  
1992 Kawasaki Medical School, Okayama, Japan  
1992 Mallya Apollo Hospital, Bangalore, India  
1992 Broussais Hospital, Paris, France  
1993 Heart Institute of Japan, Tokyo Women's Medical College, Tokyo, Japan  
1993 New York University, Bellevue Medical Center, New York City, New York  
1993 Hahneman University School of Medicine, Philadelphia, Pennsylvania  
1993 Ohio State University, Columbus, Ohio  
1993 National Cardiovascular Center, Osaka, Japan  
1993 University of California San Diego, California  
1994 University of Griefswald, Germany  
1994 Texas A & M Health Sciences Center, Temple, Texas  
1994 Emory University, Atlanta, Georgia  
1995 Montreal Heart Institute, Montreal, Canada  
1995 Baylor College of Medicine, Houston, Texas  
1995 Texas Heart Institute, St. Episcopal Hospital, Houston, Texas  
1996 University Texas Health Science Center, St. Luke's Medical Center, Houston TX  
1996 Georgetown University Medical Center, Washington, District of Columbia  
1996 University of Virginia Health Sciences Center, Charlottesville, Virginia  
1997 William Beaumont Hospital, Royal Oak, Michigan  
1997 University of Southern California, Los Angeles, California  
1997 Graduate Hospital, Philadelphia, Pennsylvania  
1997 University of Pennsylvania, Philadelphia, Pennsylvania  
1997 Harper Hospital, Detroit, Michigan  
1998 University of California, San Diego, San Diego, California  
1999 Case Western Reserve University, Cleveland, Ohio  
1999 Brigham and Women's Hospital, Boston, Massachusetts  
2000 Montefiore Medical Center, New York, New York  
2000 Wake Forest University, Winston Salem, North Carolina  
2000 Thomas Jefferson University, Philadelphia, Pennsylvania  
2000 St. Luke Roosevelt Hospital, New York, New York  
2000 Moses Cone Hospital, Greensboro, North Carolina  
2000 Cedars Sinai Medical Center, Los Angeles, California  
2000 University of North Carolina, Chapel Hill, North Carolina  
2000 Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania.  
2000 Lennox Hill Hospital, New York, New York.  
2000 University of California, Los Angeles, California  
2000 The University of Pittsburgh, Pittsburgh, Pennsylvania.  
2000 Ottawa Heart Institute, Ottawa, Canada

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- 2000 Lahey Hospital and Clinic, Andover, Massachusetts
- 2000 Columbia University Medical Center, New York, New York
- 2000 Dayton Heart Hospital, Dayton, Ohio, September
- 2000 Medical College of Virginia University, September Richmond Virginia,
- 2000 University of Kansas Medical Center, October Kansas City, Missouri,
- 2000 University of Missouri, October Kansas City, Missouri,
- 2000 Beth-Israel Deaconess Medical Center, November Boston, Massachusetts.
- 2000 University of Minnesota, October Minneapolis, Minnesota,
- 2000 Brigham and Women's Hospital, November Boston, Massachusetts,
- 2000 University of Colorado, September Denver, Colorado
- 2000 University of Michigan, December Ann Arbor, Michigan
- 2000 University of Indiana, December, Indianapolis, Indiana
- 2001 St. Michael's Hospital, January Toronto, Canada,
- 2001 Northwestern University, January Chicago, Illinois
- 2001 Baylor College, February Houston, Texas
- 2001 University of Wisconsin Medical School, August Madison Wisconsin
- 2001 University of California Los Angeles, September Los Angeles California,
- 2001 University of Chicago, Dept. of Cardiology October, Chicago Illinois
- 2002 Mount Sinai Medical School, January, New York NY
- 2002 Yale University, January, Hartford CT
- 2002 State University of New York, February, Brooklyn NY
- 2002 University of California, San Diego, February, San Diego CA
- 2002 University of California, Davis, April, Sacramento CA
- 2002 Torrance Memorial Medical Center, August, Torrance CA

**Named Lectureships:**

- 1992 Helen S. Perlman Lecture, New York Cardiological Society. "Intracoronary Ultrasound" at NYCS 64<sup>th</sup> Annual Scientific Session: New Technologies for Cardiovascular Diagnosis and Treatment, New York, New York
- 1994 Newell Powell Lecturer, Texas A&M University College of Medicine, Scott and White Clinic, "Coronary Intravascular Ultrasound", Temple, Texas
- 1994 Sixth Annual John J. Donnell Lectureship, "The Basics of Intravascular Ultrasound", Oklahoma Heart Center, Oklahoma City, Oklahoma.
- 1994 Mandel Visiting Professor, Lecture: "Coronary Intravascular Ultrasound" The Graduate Hospital, Philadelphia, Pennsylvania.

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- 2001 David M. Pugh Lectureship: "Intravascular Ultrasound Characterization of Plaque Rupture", October, Kansas City Missouri.
- 2001 Malcom C. Crow Memorial Lecture: "A Change of Heart: Lipids in Heart Disease", Society of Air Force Physicians Annual Conference, Biloxi Mississippi March 8, 2001
- 2001 New Concept of Coronary Artery Disease: Drugs or Invasive Therapy" Karolinska Lecture, Karolinska Institute Stockholm Sweden, June 13, 2001.
- 2002 16th James Bryan Herrick Lecture: "New Technologies and Their Impact on Cardiology" "IVUS: Insights into Atherosclerosis" Illinois Chapter, American College of Cardiology in association with the American Heart Association, Midwest Affiliate 5th Annual Spring Symposium.
- 2002 "New Insights into the Atherosclerotic Disease Process" Merck Frosst Distinguished Visiting Professor, Mount Sinai Hospital & University Health Network, Toronto, Ontario, Canada, June 4, 2002

#### **ACCEL Interviews:**

- 1. "Thrombolysis and Angioplasty in Unstable Angina Trial" Interviewed: J.A. Ambrose, M.D., January 1994
- 2. "Restenosis: The Clinical Problem" Interviewed: David R. Holmes, M.D., March
- 3. "Left Ventricular Remodeling"—Effect of Nitric Oxide in Man, Interviewed: W.J. Paulus, M.D., March 1994
- 4. "Primary PTCA in Acute Myocardial Infarction: Summary of Recent Trials", Interviewed: Cindy Grines, M.D., April 1994
- 5. "Local Drug Delivery in the Coronary Artery", Interviewed: A. Michael Lincoff, M.D., July 1994
- 6. "Optimal Management of Cardiogenic Shock in Acute MI", Interviewed: Eric R. Bates, M.D., October 1994
- 7. "The Potential for Unexpected Hazard of Intravenous Beta-Blockade for Acute Myocardial Infarction: Results from the GUSTO Trial", Interviewed: Robert M. Califf, M.D., April 1995
- 8. "The Survival Advantage of Early Grade 3 Patency after Thrombolysis for Infarction Increases Over Time", Interviewed: Allan M. Ross, M.D., May 1995
- 9. "The PRAISE Trial (Prospective Randomized Amlodipine Survival Evaluation), Interviewed: Milton Packer, M.D., May 1995

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10. "Importance of Prostaglandins and Endothelial Factors in Cardiac Failure-Endothelins", Interviewed: John Cleland, M.D., October 1995.
11. "The UK National Valve Registry: The Changing Pattern of Valve Usage and Long-Term Results", Interviewed: Kenneth M. Taylor, M.D., October 1995
12. "Clinical Experience with the Heparin-Coated Stent" Interviewed: Patrick W. Serruys, M.D., February 1996.
13. "ECG Correlates of Ischemia: Reduction in QT Dispersion by Successful PTCA in Patients Without Acute MI, Active Myocardial Ischemia, or Malignant Ventricular Arrhythmias", February 1996.
14. "A Prospective Study of Arrhythmia's in 93 Patients Following the Fontan Procedure", Interviewed: Helena Gardiner, M.D., August 1996.
15. "A World Wide Web Database: An Efficient New Medium for Multi-Center Clinical Trials and Patient Registries", Interviewee: John F. Murphy, M.D., February 1997.
16. "Role of Insulin-Like Growth Factor in Cardiovascular Pathophysiology: Growth Factor Therapy for the Failing Heart—Past, Present and Future", Interviewee: Kenneth R. Chien, M.D., February 1997.
17. "Platelet Receptor Inhibition for Ischemic Syndrome Management (PRISM)", Interviewed: Harvey D. White, M.D., April 1997.
18. "Present Status of Stent Therapy in Acute Myocardial Infarction", Interviewed: Cindy L. Grines, M.D., May 1997
19. "Telemedicine in the Practice of Cardiology", Interviewed: James D. Thomas, M.D., September 1997
20. "Ultrasound in the 90's: Is Intravascular Ultrasound a Clinical Tool?" Interviewed: Gary S. Mintz, M.D., October 1997.
21. "What is the Stimulus to Cardiac Growth?" Interviewed: George Cooper, M.D., November 1997.
22. "Balloon Angioplasty for In-Stent Restenosis", Interviewed: Balloon Angioplasty for In-Stent Restenosis", Interviewed: Helene Eltchaninoff, M.D., December 1997
23. "Preconditioning—Cardiologist's Perspective", Interviewed: Francis J. Klocke, M.D., December 1997.
24. "Surgical Approaches to Mitral Regurgitation (Repair, Hemograft, and Minimally Invasive)", Interviewed: Delos M. Cosgrove, M.D., January 1998
25. "From Big A to Small (a) or Vice Versa", Interviewed: Angelo, M. Scanu, M.D., February 1998.

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26. "Local Vascular Therapy Against Thrombus and Proliferation: Stent Based Delivery Systems", Interviewed: Nicolas Chronos, M.D., May 1998
27. "Impact of Antiarrhythmic Trials on Treatment for Sudden Cardiac Death: MADIT II", Interviewed: Arthur J. Moses, M.D., June 1998.
28. "EBCT Defined Coronary Calcium: Value as an End Point", Interviewed: William Stanford, M.D., August 1998
29. "An Echocardiatic Evaluation of Patients Exposed to Anorexigens as Compared to Unexposed Matched Controls", Interviewed: Julius M. Gardin, M.D., November 1998.
30. "Targeting Cell Cycle Regulatory Genes in Treating Vascular Disease", Interviewed: Elizabeth G. Nabel, MD, November 1998
31. "Nuclear Techniques for Reducing Hospital Costs and Length of Stay: Gatekeeper to the Cath Lab", Interviewed: Rory Hachamovitch, M.D., November 1998.
32. "Overview of the Promise of Platelet Receptor GpIIb/IIIa Antagonists with Balloon Angioplasty", Interviewed: Dean J. Kereiakes, M.D., November 1998
33. "Effectiveness of intervention to improve cardiovascular care", Interviewee: Daniel Stryer, M.D., March 1999.
34. "PTCA revascularization in patients with impaired left ventricular function", Interviewee: Michael Tendera, M.D., March 1999
35. "A View of the Bridge: The Effectiveness of Interventions to Improve Cardiovascular Care", Interviewed: Daniel B. Stryer, M.D., March 1999.
36. "Percutaneous Revascularization in Patients with Impaired Left Ventricular Function", Interviewed: Michael P. Tendera, M.D., March 1999.
37. "Should Intravenous Isotropic Drugs be given intermittently" Interviewed: Anne M. Keogh, MD, March 1999.
38. "Magnetic Resonance Angiography: The New Screening Test for Coronary Artery Disease" Interviewee: Dudley J. Pennell, M.D., August 2000.

**Invited Lectures (Selected):**

- 1983 Fireside Panel: "Digital Subtraction Angiography" 56<sup>th</sup> Annual Scientific Sessions of the American Heart Association Anaheim, California.
- 1983 "Interpretation of Electrocardiograms", Annual Meeting of the Kentucky Medical Association Louisville Kentucky
- 1983 Symposium: Perspectives in Cardiovascular Disease "Cardiac Applications of Digital Subtraction Angiography" American Heart Association, Eastern Ohio Chapter, Youngstown, Ohio.

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- 1983 "Management of Hemodynamic Complications of Acute MI" Advances in Cardiovascular Medicine American Heart Association, Kentucky Heart Affiliate.
- 1984 Program Co-Director: 1<sup>st</sup> International Postgraduate Winter Workshop on "Digital Imaging in Cardiology", Munich, West Germany.
- 1985 Fireside Panel: "Is It Time for a Centralized Cardiac Image Processing Laboratory?" American College of Cardiology Annual Scientific Sessions Miami Beach, Florida
- 1985 "Cardiac Applications of Digital Subtraction Angiography", The 38<sup>th</sup> Annual Conference on Engineering in Medicine and Biology, American Congress Hotel, Chicago, Illinois
- 1985 Program Co-Director: "Symposium on Digital Cardiac Imaging", Preceding the American Heart Association Annual Scientific Sessions, Washington, District of Columbia.
- 1986 "Assessment of Coronary Flow Reserve by Digital Angiography" The 4<sup>th</sup> International Workshop on Progress in Angiocardiology" Kiel, West Germany.
- 1986 "Calculation of Aortic Regurgitant Fraction by Computer Analysis of Digital Subtraction Angiography," Fourth International Workshop on Progress in Angiocardiology", Kiel West Germany.
- 1987 Program Co-Director, "Digital Cardiac Imaging, 1987" Lectures: "Principles of Digital Cardiac Imaging" and "Methods for Assessment of Coronary Flow Reserve by Digital Angiography", Symposium Preceding the American Heart Association Annual Scientific Sessions, Anaheim, California.
- 1987 Fireside Panel Chairman and Moderator: "Assessment of the Physiologic Consequences of Coronary Stenosis", 36<sup>th</sup> Annual Scientific Sessions, American College of Cardiology, New Orleans, Louisiana.
- 1989 Chairman (Abstract Session) Digital Cardiovascular Imaging and Ultrafast CT, 38<sup>th</sup> Annual Scientific Session, American College of Cardiology, Anaheim, California .
- 1989 "How to Configure a Catheterization Laboratory in 1989", Meet the Experts, 38<sup>th</sup> Annual Scientific Session, American College of Cardiology, Anaheim, California.
- 1989 "Recent Advances in the Management of Cardiogenic Shock", Core Curriculum, 38<sup>th</sup> Annual Scientific Session, American College of Cardiology, Anaheim, California.
- 1989 Chairman, Symposium: "New Cardiac Imaging Modalities: Value and Limitations" 38<sup>th</sup> Annual Scientific Session, American College of Cardiology Anaheim, California.
- 1989 "Digital Angiography: Is it Ready to Replace Cine Film?" the 38<sup>th</sup> Annual Scientific Session, American College of Cardiology, Anaheim California.

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- 1989 "Digital Cardiac Imaging" the 1<sup>st</sup> Annual General Electric Cardiac Users Symposium, New Orleans Louisiana
- 1989 "Regional Assessment of Coronary Flow Reserve" 3<sup>rd</sup> International Symposium on Quantitative Angiography, Erasmus University, Rotterdam, The Netherlands
- 1989 "Assessment of Coronary Flow Reserve by Digital Angiography" International Symposium: Digital Subtraction Angiography and Parametric Imaging, Zurich, Switzerland.
- 1989 "Densitometric Calculation of Right and Left Ventricular Ejection Fraction" International Symposium: Digital Subtraction Angiography and Parametric Imaging, Zurich, Switzerland.
- 1989 "Cardiogenic Shock" Cardiology Grand Rounds at the University of Louisville, Louisville, Kentucky.
- 1990 Symposium - Advances in Diagnostic and Therapeutic Cardiac Ultrasound", Lecture: "Evaluation of Coronary Dimensions by Intravascular Ultrasound" The 39<sup>th</sup> Annual Scientific Session American College of Cardiology, New Orleans, Louisiana.
- 1990 Chairman, Mini-Course - "How to Configure a Cardiac Catheterization Laboratory in 1990" The 39<sup>th</sup> Annual Scientific Session, American College of Cardiology, New Orleans, Louisiana.
- 1990 Luncheon Panel - "New Invasive and Noninvasive Approaches to Imaging Coronary Artery and Bypass Graft Anatomy and Determining Blood Flow: Implications for Clinical Practice" The 39<sup>th</sup> Annual Scientific Session, American College of Cardiology, New Orleans, Louisiana.
- 1990 "Evaluation of Coronary Disease by Intravascular Ultrasound", the 2<sup>nd</sup> International Congress on Ultrasound and Color Flow Doppler, Dubrovnik, Yugoslavia
- 1990 "Ultrasound Evaluation of Coronary Morphology" Cardiology Grand Rounds, University of Texas, San Antonio, Texas
- 1990 "Flow and Flow Reserve by Digital Coronary Angiography" International Workshop on Digital Angiocardiography, Kiel, West Germany
- 1990 "Filtration Techniques in Coronary Imaging", International Workshop on Digital Angiocardiography, Kiel, West Germany.
- 1990 "Intravascular Ultrasound Imaging of the Coronary Arteries", Grand Rounds, Philadelphia Heart Institute, Philadelphia, Pennsylvania.
- 1990 "Coronary Intravascular Ultrasound" Grand Rounds, CNR Institute of Clinical Physiology, University of Pisa, Italy.

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- 1990 "Disorders and Diseases of the Cardiovascular System, State of the Art in Diagnosis", lecture to the Staff of the American College of Cardiology Bethesda, Maryland.
- 1990 "Intracoronary Echocardiography before and after PTCA", Symposium on Interventional Cardiology, Dutch Heart Association University of Nijmegen, The Netherlands
- 1990 "Intravascular Ultrasound in the Evaluation of PTCA Results", Symposium: Advances in Interventional Cardiology, Detroit, Michigan.
- 1990 "Coronary Ultrasound: Guide to Interventional Cardiology and Identification of Disease in Angiographically Normal Vessels", Update in Echocardiography, Harvard University, Boston, Massachusetts.
- 1990 "Intravascular Ultrasound with a Multi-Element Catheter System" Guest Lecturer, Philips Medical Systems, Eindhoven, The Netherlands.
- 1990 "Development of a Multi-Element Intravascular Ultrasound System", Guest Lecturer, Hewlett-Packard Corp., Andover, Massachusetts.
- 1990 Lifetime Medical Television, "Intravascular Ultrasound Imaging"
- 1990 "Principles of Radiographic Systems for Cardiac Imaging", Cardiology Catheterization Conference, William Beaumont Hospital, Royal Oak, Michigan
- 1990 "How to Use Intraluminal Ultrasound Clinically" How-to Sessions, American Heart Association Scientific Sessions, Dallas, Texas
- 1990 "Intravascular Echocardiography - A New Method for Detecting Coronary Atherosclerosis", Symposium: Newer Concepts in the Diagnosis and Treatment of Cardiac Disease: An Update for the Visiting Professor, Ft. Lauderdale, Florida.
- 1990 "Coronary Intravascular Ultrasound" New Technology in Invasive Cardiology, Luncheon Panel, American College of Chest Physicians, Toronto, Ontario, Canada
- 1990 Symposium: Intravascular Ultrasound Imaging: A Demonstration Course for the Interventionist, Lecture: "Accuracy of Intravascular Ultrasound Imaging" Anaheim, Ca.
- 1990 Chairman, Symposium: New Frontiers in Cardiac Imaging, "Intravascular Ultrasound in the Evaluation of Atherosclerotic Wall Morphology", Preceding AHA Scientific Sessions, Dallas, Texas.
- 1990 "The Digital Cardiac Catheterization Laboratory of the Future: What Design and Architecture", New Frontiers in Cardiac Imaging, Preceding AHA Scientific Sessions, Dallas, Texas.



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- 1990 "Use of Phased Array Intravascular in Assessment of Atherosclerotic Vascular Disease" Ultrasound Angioscopy, Endovascular Surgery, and Interventional Techniques, Harvard University, Boston Mass.
- 1990 "Coronary Intravascular Ultrasound Imaging" Cardiology Grand Rounds, Loma Linda University, California
- 1990 "Application of Coronary Intravascular Ultrasound to Evaluation of Angioplasty Results" Sharp Memorial Hospital, San Diego, California
- 1991 "Coronary Imaging by Intravascular Ultrasound" Cardiology Grand Rounds, University of Minnesota, Minneapolis, Minnesota
- 1991 "Intravascular Ultrasound Imaging of the Coronary Arteries", Advanced Echocardiography: Case Studies and Concepts, ACC Heart House Course, Bethesda, MD.
- 1991 "Intravascular Echo to Assess Coronary Plaque and the Results of Interventions", Symposium: Advances in Diagnostic and Therapeutic Catheterization, Orlando, Florida.
- 1991 "How to Configure or reconfigure a Cath Lab for the 1990's" Symposium: Advances in Diagnostic and Therapeutic Catheterization, Orlando, Fla.
- 1991 "Coronary Intravascular Ultrasound" Texas Heart Association, San Antonio Affiliate, San Antonio, Texas
- 1991 Lecture: "Principles of X-Ray Imaging in the Cardiac Catheterization Laboratory" Inaugural Meeting, Michigan Cardiology Fellows Society, Dearborn, Michigan.
- 1991 "Lessons Learned from Ultrasound Imaging of the Coronary Arteries", 10<sup>th</sup> Mid-Winter Cardiovascular Symposium, West Virginia Heart Association, Snowshoe, WV
- 1991 "Aggressive Management of Cardiogenic Shock", 10<sup>th</sup> Mid-Winter Cardiovascular Symposium, West Virginia Heart Association, Snowshoe, WV
- 1991 "Combination of Low-Dose tPA plus Streptokinase in Acute Myocardial Infarction", 10<sup>th</sup> Mid-Winter Cardiovascular Symposium, West Virginia Heart Association, Snowshoe, West Virginia
- 1991 Symposium: Intravascular Ultrasound and Intracardiac Echocardiography Lecture: "Intravascular Ultrasound Evaluation of the Coronary Arteries at Angiographically 'Normal' Sites" Preceding the AHA Annual Scientific Sessions, Atlanta, Georgia.
- 1991 Chairman, Coronary Artery Assessment by New Techniques, Annual Scientific Sessions, American College of Cardiology, Atlanta, Georgia.

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- 1991 Fireside Panel: "Noninvasive and Invasive Approaches to Imaging Coronary Arteries Implications for Clinical Practice" Annual Scientific Sessions, American College of Cardiology, Atlanta Georgia.
- 1991 Meet-the Experts: "How to Perform Intravascular Ultrasound Studies" Annual Scientific Sessions, American College of Cardiology, Atlanta, Georgia.
- 1991 Audiotape: "Coronary Intravascular Ultrasound" ACCEL, American College of Cardiology, Bethesda, Maryland.
- 1991 "Introduction to Intravascular Ultrasound Imaging" and "Clinical Applications of Coronary Intravascular Ultrasound" 8<sup>th</sup> Annual Interventional Cardiology Symposium, Iowa Heart Center, Des Moines, Iowa
- 1991 "Application of Intravascular Ultrasound to Decision-Making in Coronary Interventions" The 9<sup>th</sup> International Symposium on Echocardiography, Rotterdam, The Netherlands
- 1991 "Coronary Intravascular Ultrasound Imaging" Cardiology Grand Rounds, Bowman-Gray University, Winston-Salem North Carolina
- 1991 "Aggressive Management of Cardiogenic Shock", Cardiology Grand Rounds, Bowman-Gray University, Winston-Salem North Carolina
- 1991 "Principles of Digital Image Processing in Echocardiography", Advanced Echocardiography and Doppler Ultrasound, ACC Extramural Symposium, San Diego, California.
- 1991 "Intravascular Imaging of the Coronary Arteries", Advanced Echocardiography and Doppler Ultrasound, ACC Extramural Symposium, San Diego, California.
- 1991 "Intravascular Ultrasound in the Detection and Quantitation of Coronary Atherosclerosis" Second International Workshop on New Trends in Cardiovascular Therapy and Technology, Genoa, Italy
- 1991 "Comparison of Quantitative Coronary Angiography and Intravascular Ultrasound" 4<sup>th</sup> International Symposium on Coronary Arteriography, Rotterdam, The Netherlands
- 1991 "Film Cineangiography vs. Digital Coronary Imaging", 4<sup>th</sup> International Symposium on Coronary Arteriography, Rotterdam, The Netherlands.
- 1991 "Coronary Intravascular Ultrasound" Grand Rounds: Mt. Diablo Hospital, Pleasanton, California.
- 1991 "Quantitative Assessment of Coronary Artery Disease by Intravascular Ultrasound", World Federation of Ultrasound in Medicine and Biology, Copenhagen, Denmark
- 1991 Chairman, Cardiology Abstract Session, World Federation of Ultrasound in Medicine and Biology, Copenhagen, Denmark

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- 1991 "Coronary Intravascular Ultrasound" Symposium: Echo Now ~ Echo 2000, Williamsburg, Virginia.
- 1991 "Clinical Applications of Intravascular Echo: Clinical Correlation's and Practical Applications" and "Principles of Digital Echocardiography" New Technologies in Cardiovascular Ultrasound, Fourth Annual Symposium and Satellite Teleconference, Mayo Clinic, Rochester, Minnesota.
- 1991 "Introduction to Cardiovascular Ultrasound" Invasive Echocardiography, A Live Demonstration Symposium, Cleveland Clinic, Cleveland, Ohio
- 1991 "Quantitative Coronary Arteriography: Approaches, Methods, Problems", "Intravascular Ultrasound Imaging of Coronary Arteries", and "Digital Coronary Arteriographic Assessment of Coronary Flow and Flow Reserve" Heart House Course, Intravascular Imaging and Therapy, Bethesda, Maryland.
- 1991 "Intravascular Ultrasound Imaging of the Coronary Arteries", Cardiology Grand Rounds, George Washington University Medical Center, Washington, District of Columbia
- 1991 "Comparison of Intravascular Ultrasound and Quantitative Angiography", Workshop in Advanced Coronary Imaging preceding the AHA Scientific Sessions, Anaheim, California.
- 1991 "Use of Phased Array Ultrasound in the Assessment of Atherosclerotic Vascular Disease" Symposium: Angioscopy, Endovascular Surgery, and Interventional Techniques, New England Deaconess Hospital and Harvard Medical School, Boston, Massachusetts.
- 1991 "Technical Development and Scientific Insights from Coronary Intravascular Ultrasound" Guest Lecture, Acuson Corp., Mountain View, California
- 1991 "Detection and Quantitation of Coronary Artery Disease by Intravascular Ultrasound" Cardiology Grand Rounds, New England Deaconess Hospital, Boston, Massachusetts
- 1992 "Assessment of Coronary Artery Disease by Intravascular Ultrasound" Esaote Biomedica, Florence, Italy.
- 1992 "Importance of Intracoronary Imaging in Patients with Normal and Pathologic Angiograms", New Trends in Cardiovascular Ultrasound and Interventional Cardiology, International Symposium, Bad Hofgastein, Austria
- 1992 "Detection and Quantitation of Coronary Artery Disease by Intravascular Ultrasound", Frankfurt University Hospital, Frankfurt, Germany
- 1992 "Koroner Arter Hasaliklarinin Degerlendirilmesinde Intravaskuler Ultrasound" Istanbul, Turkey.
- 1992 "Emerging Role of Intravascular Ultrasound in Characterizing Coronary Lesions," Cardiology Grand Rounds, Thomas Jefferson University, Philadelphia, Pennsylvania

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- 1992 "Lessons Learned from Coronary Intravascular Ultrasound" 1<sup>st</sup> Annual Beaumont-Duke Cardiology Conference, Beaver Creek, Colorado
- 1992 "Intravascular Ultrasound Assessment of PTCA" Symposium: Advancing Frontiers in Interventional Cardiology. Loma Linda University Medical Center, Loma Linda, California.
- 1992 Helen S. Perlman Lecture, New York Cardiological Society. "Intracoronary Ultrasound" at NYC 64<sup>th</sup> Annual Scientific Session: New Technologies for Cardiovascular Diagnosis and Treatment, New York, New York.
- 1992 Meet-the-Experts: "Coronary Ultrasound" 41<sup>st</sup> Annual Scientific Sessions, American College of Cardiology, Dallas, Texas.
- 1992 "Assessment of Angioplasty Results by Intravascular Ultrasound" Symposium: Intravascular Ultrasound Principles, Current Role and Future Directions, 41<sup>st</sup> Annual Scientific Sessions, American College of Cardiology, Dallas, Texas.
- 1992 Meet-the-Experts: "Conventional and Thrombolytic Approaches to Cardiogenic Shock" 41<sup>st</sup> Annual Scientific Sessions, American College of Cardiology, Dallas, Texas.
- 1992 "Quantitation of Coronary Atherosclerosis by Intravascular Ultrasound", Satellite Symposium, Japanese Society of Echocardiography, Kobe, Japan
- 1992 "Coronary Intravascular Ultrasound" Grand Rounds, Kawasaki Medical School, Okayama, Japan.
- 1992 "Principles of X-ray Imaging in the Catheterization Laboratory", Cardiac Catheterization Imaging and Interventional Techniques for the 1990's, Hong Kong
- 1992 "Value and Limitations of Digital Angiography in the Assessment of Coronary Flow Reserve", Cardiac Catheterization Imaging and Interventional Techniques for the 1990's, Hong Kong
- 1992 "Intravascular Ultrasound: Insights into Atherosclerosis", Cardiac Catheterization Imaging and Interventional Techniques for the 1990's, Hong Kong.
- 1992 "Development and Applications of Coronary Intravascular Ultrasound" Cardiological Society of India, Bangalore, India
- 1992 "Evaluation of Plaque Morphology Using Intravascular Ultrasound" Symposium - Intravascular and Intracardiac Ultrasound, American Society of Echocardiography, Boston, Massachusetts
- 1992 Chairman, Abstract Session "Ultrasound, American Society of Echocardiography" Boston, Massachusetts.

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- 1992 "Coronary Intravascular Ultrasound with Electronic Probes", 4<sup>th</sup> International Symposium on Invasive Cardiology, Alghero, Sardinia, Italy.
- 1992 "Coronary Intravascular Ultrasound" Cardiology Grand Rounds, Hospital Broussais, Paris, France
- 1992 "Application of Coronary Intravascular Ultrasound in Cardiovascular Diagnosis and Therapy" University Hospital, Augusta, Georgia
- 1992 "Intraluminal Ultrasound", Interventions in the Treatment of Heart Disease: A Three-Day Course, New York Cardiological Society, New York
- 1992 "Assessment of the Immediate Results of PTCA by Intraluminal Ultrasound" Interventions in the Treatment of Heart Disease: A Three-Day Course, New York Cardiological Society, New York.
- 1992 "Current and Future Applications of Intracoronary Ultrasound" Cardiology Grand Rounds, St. Thomas Hospital, Nashville Tennessee
- 1992 "Intravascular Echocardiography" 11<sup>th</sup> Annual Cardiology Update, East Jefferson Hospital, New Orleans, Louisiana
- 1992 "Echocardiography in the Cath Lab" Second Annual Echo Retreat Meeting, Williamsburg, Virginia
- 1992 "Coronary Intravascular Ultrasound" Symposium of New Directions in Interventional Cardiology, Amsterdam, The Netherlands
- 1992 "Intracoronary Ultrasound: State of the Art" 5<sup>th</sup> Mayo-Mainz Symposium on New Technologies in Cardiovascular Ultrasound, Frankfurt-Mainz, Germany.
- 1992 "Intravascular Ultrasound: Applications in Cardiovascular Diagnosis and Assessment of the Results of Angioplasty" East European Conference on Echocardiography, Bratislava, Czechoslovakia.
- 1992 "Intravascular Ultrasound of the Coronary Arteries" 9<sup>th</sup> Annual Army American College of Physicians Scientific Sessions, San Francisco, California
- 1992 Chairman, Abstract Presentations, "Intravascular Ultrasound I" American Heart Association, Annual Scientific Sessions, New Orleans, Louisiana
- 1993 "Intracoronary Ultrasound: Recent Advances in Technique and Application" Update in Clinical Echocardiography. Courmayeur - Monte Bianco, Italy
- 1993 "Role of Intracoronary Ultrasound in Assessing the Results of PTCA" Update in Clinical Echocardiography, Courmayeur - Monte Bianco, Italy

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- 1993 "Controversy: Intravascular Echocardiography is Superior to Contrast Angiography in Detecting Atherosclerotic Lesions", Update in Clinical Echocardiography. Courmayeur - Monte Bianco, Italy
- 1993 "Intravascular Ultrasound" Great Teachers and Topics in Cardiology, 1993 San Francisco Heart Institute at Seaton Medical Center, San Francisco, California.
- 1993 "Coronary Intravascular Ultrasound Evaluation of Plaque Morphology Following Angioplasty" and "Configuration of a Cardiac Catheterization Laboratory - 1993 at 5<sup>th</sup> Annual Symposium on Advances in Diagnostic and Therapeutic Catheterization, American College of Cardiology, Orlando, Florida.
- 1993 "Coronary Intravascular Ultrasound" Cardiology Grand Rounds, New York University, Bellevue Medical Center, New York
- 1993 "Intravascular Ultrasound of Plaque" Myocardial Reperfusion: Concepts and Controversies, Sixth Annual International Symposium, Anaheim, California.
- 1993 Fireside Panel. Intravascular Ultrasound: Clinical Applications and Limitations" 42<sup>nd</sup> Annual scientific Sessions, American College of Cardiology Anaheim, California.
- 1993 Chairman, Abstract Session "Usefulness of Intracoronary Ultrasound/Angioscopy During Coronary Angioplasty" 42<sup>nd</sup> Annual Scientific Sessions, American College of Cardiology, Anaheim, California.
- 1993 "Coronary Intravascular Ultrasound" 2<sup>nd</sup> International Symposium on Intravascular Ultrasound, Japanese Society of Echocardiography, Tokyo, Japan
- 1993 "Application of Intravascular Ultrasound for Assessment of Coronary [Interventions", at Interventional Approaches to Coronary Artery Disease: Diagnosis and Treatment, New England Deaconess Hospital and Harvard Medical School, Boston, Massachusetts.
- 1993 "Clinical Applications of Coronary Intravascular Ultrasound", St. Louis Interventional Cardiology Society, St. Louis, Missouri
- 1993 "Application of Intravascular Ultrasound to Assessment of Coronary Interventions: Implications for Restenosis" The 5<sup>th</sup> Annual Restenosis Summit, Cleveland, Ohio.
- 1993 "Combined Ultrasound Imaging: Coronary Interventional Techniques" Third European Conference on Future Directions in Interventional Cardiology, Monte Carlo, Principality of Monaco.
- 1993 "Intracoronary Ultrasound: Application for Decision-Making in Coronary Interventions" Future Perspectives in Interventional Cardiology, Heinrich-Heine University, Düsseldorf, Germany.

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- 1993 "The Role of Intravascular Ultrasound in Interventional Cardiology" The 3<sup>rd</sup> Annual Update on Basic and Advanced Techniques in Interventional Cardiology, Singapore
- 1993 Program Director: Acute Decisions, Current Issues in the Diagnosis and Management of the Acutely Ill Cardiac Patient and lecturer: "Management of Cardiogenic Shock and Hemodynamic Complications of Myocardial Infarction" Cleveland, Ohio.
- 1993 "Application of Coronary Intravascular Ultrasound to Coronary Interventions" The Heart Institute of Japan, Tokyo Women's Medical College, Tokyo, Japan.
- 1993 Cardiology Grand Rounds, Hahnemann University School of Medicine, "Coronary Intravascular Ultrasound" Philadelphia, Pennsylvania.
- 1993 Cardiology Grand Rounds, Ohio State University, "Coronary Intravascular Ultrasound" Columbus, Ohio.
- 1993 "Morphology of Coronary Atherosclerosis as Visualized by Intravascular Ultrasound" Current Challenges in the Diagnosis and Management of Lipid Disorders, The ASEANZ Lipid Forum, Singapore
- 1993 "The Role of Coronary Intravascular Ultrasound in Diagnostic and Interventional Cardiology" Grand Rounds, The National Cardiovascular Center, Osaka, Japan
- 1993 "Intravascular Ultrasound in Interventional Cardiology" at the Cardiac Society of Australia and New Zealand, 41<sup>st</sup> Annual Scientific Meeting Christchurch, New Zealand
- 1993 "Intravascular Ultrasound" Cardiovascular Update 1993, The Heart Institute of Spokane, Spokane, Washington.
- 1993 "Coronary Intravascular Ultrasound" American Association of Cardiovascular and Pulmonary Rehabilitation 8<sup>th</sup> Annual Scientific Sessions, Orlando, Florida
- 1993 "Differential Diagnosis: Role of Cardiac Catheterization and Intravascular Ultrasound" Issues in Critical Care 1993: Management Controversies in Unstable Angina, Symposium at the American Heart Association Annual Scientific Sessions, Atlanta, Georgia.
- 1993 "How to Use Intravascular Ultrasound to Enhance Choice of Interventional Devices" Luncheon Panel, American Heart Association Annual Scientific Sessions, Atlanta, Georgia.
- 1993 Director, Symposium: Beyond Angiography. Lectures: "Theoretical and Practical Limitations of Angiography: Why Do We Need Alternative Modalities" and "Atherosclerotic Plaque Morphology: Characterization by Intravascular Ultrasound," Preceding the American Heart Association Scientific Sessions, Atlanta, Georgia.
- 1993 "Intravascular Ultrasound to Assess Coronary Stenoses" State of the Art Conference on Invasive Cardiology, American Heart Association Symposium, Washington, D.C

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- 1994 "Recent Developments in the Clinical Application of Intravascular Ultrasound" at New Trends in Cardiovascular Ultrasound and Interventional Cardiology, Bad Hofgastein, Austria
- 1994 "Coronary Intravascular Ultrasound" International Congress VII, Endovascular Interventions, Arizona Heart Institute, Phoenix, Arizona.
- 1994 Meet the Experts, "Coronary Intravascular Ultrasound" Lecture: "Impact of Reference Disease on the Results of Coronary Angioplasty" moderator, abstract session, Intravascular Ultrasound, Angioscopy and Doppler Flow Wire at Sixth Annual Transcatheter Therapeutics, Washington, District of Columbia.
- 1994 "Insights from Intravascular Ultrasound" Myocardial Reperfusion Concepts and Controversies, Seventh Annual International Symposium, Atlanta, Georgia.
- 1994 Meet the Experts, "Intravascular Ultrasound Imaging" American College of Cardiology 43<sup>rd</sup> Annual Scientific Sessions, Atlanta, Georgia.
- 1994 "Application of Coronary Intravascular Ultrasound to Interventional Decision-Making" Philadelphia Academy of Cardiology, Philadelphia, Pennsylvania.
- 1994 Intravascular Imaging Clinical Applications in the Catheterization Laboratory" and Interventional Workshop: "Intravascular Imaging" Cardiac Fiesta in San Antonio: Update on Cardiac Diagnostic and Therapeutic Techniques", American College of Cardiology, San Antonio, Texas.
- 1994 "Cardiogenic Shock" 14<sup>th</sup> Annual Dimensions in Cardiac Critical Care Nursing Symposium, Cleveland Clinic Foundation, Cleveland, Ohio
- 1994 "Intravascular Ultrasound of Unstable Angina" Technical and Biological Aspects of Interventional Cardiology: A live Case Demonstration Course, Third Annual Symposium, Harvard Medical School, Boston, Massachusetts
- 1994 "Application of Computer Techniques to Cardiovascular Research", Council on Clinical Cardiology of the American Heart Association; American College of Cardiology and National Heart, Lung and Blood Institute's How to Become a Clinical Cardiovascular Investigator, Bethesda, Maryland
- 1994 "The Role of Intravascular Ultrasound to Reduce Restenosis", Restenosis Summit VI, The Cleveland Clinic Foundation, Cleveland, Ohio
- 1994 "Application of Intravascular Ultrasound in Interventional Decision Making" Cardiology Case Conference and Internal Medicine Grand Rounds "Beyond Angiography" Scott & White Clinic, Texas A & M University, Temple, Texas
- 1994 "ACC/NEMA Standards for Filmless Cath Labs" Symposium for Administrative Directors of Cardiac Catheterization Laboratories, Advanced Cardiovascular Systems, Washington, DC



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- 1994 "Quantitative Coronary Angiography and Intravascular Ultrasound"  
International Symposium on Cardiology Today and Visions into the Next Century, The  
German Heart Center, Munich, Germany
- 1994 Meet the Experts: Intracardiac / Intravascular Ultrasound and Moderator, Debate:  
"Intravascular Echo Makes a Difference in our Approach to Coronary Artery Disease" 5<sup>th</sup>  
Annual Scientific Sessions, American Society of Echocardiography. San Francisco, CA
- 1994 "Coronary Intravascular Ultrasound", Update for Clinical Specialists,  
Heart Technology, Redmond, Washington
- 1994 "Technical Development and Scientific Insights from Coronary Intravascular Ultrasound"  
Guest Lecturer, Hewlett-Packard, Seattle, Washington
- 1994 "Intravascular Ultrasound Workshop" The 7<sup>th</sup> Congress of World Federation for Ultrasound in  
Medicine and Biology, Sapporo, Hokkaido, Japan.
- 1994 "Cardiogenic Shock: Intraaortic Balloon Pump", Cardiology Fellows Core Curriculum, Dept.  
of Cardiology, Cleveland Clinic Foundation, Cleveland, Ohio.
- 1994 "Intravascular Ultrasound: Application for Decision making in Coronary Interventions"  
Interventional Cardiovascular Therapy in 1994, First Interventional Greifswald-Karlsburg  
Workshop, Greifswald, Germany.
- 1994 "Replacement of the Cinefilm in the Catheterization Laboratory: Is it Time for the Change?"  
Satellite Symposium: Joint XII the World Congress of Cardiology and XVI Congress of the  
European Society of Cardiology, Berlin, Germany.
- 1994 "Intracoronary Ultrasound Guidance of Coronary Interventions" and "The Filmless Cardiac  
Catheterization Laboratory: Promise and Perils" 8th Annual International Workshop on  
Future Directions in Interventional Cardiology, Santa Barbara, California.
- 1994 "Introduction to Intravascular Ultrasound" Invasive Echocardiography: A Live Demonstration  
Symposium of Transesophageal and Intraoperative Echocardiography Cleveland Clinic  
Foundation, Cleveland, Ohio.
- 1994 "Basics of Intravascular Ultrasound" and "Clinical Applications of Intravascular Ultrasound"  
Trends in Interventional Cardiology, Oklahoma Heart Center, Oklahoma City, Oklahoma
- 1994 Director, Symposium: "Beyond Angiography II", Moderator, Introduction to Non-  
Angiography Imaging Modalities and "Analysis, Measurement and Interpretation of  
Intravascular Ultrasound Images" and "Application of Intravascular Ultrasound to Guidance of  
Rotational Ablation" and "Future Directions for Intravascular Ultrasound: Imaging Wires,  
Combination Devices, Reimbursement Issues", "Beyond Angiography II", Loews Anatole,  
Dallas, Texas.

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- 1994 "Intravascular Ultrasound in the Diagnosis of Coronary Artery Disease", Issues in Critical Care - Coronary Artery Disease Management Update. American Heart Association 67<sup>th</sup> Scientific Sessions, Dallas, Texas
- 1994 "Intravascular Ultrasound for Guidance of Coronary Intervention", 12<sup>th</sup> Annual Advances in Heart Disease and "Intravascular Ultrasound: Detection and Characterization of Coronary Atherosclerosis In Vivo", Twelfth Annual Advances in Heart Disease, Grand Hyatt Hotel on Union Square, San Francisco, California.
- 1994 Clinical Applications of Intravascular Ultrasound" Cardiology Grand Rounds, Emory University, School of Medicine, Atlanta, Georgia
- 1995 "Intravascular Ultrasound in Coronary Artery Disease" and "Relation Between Restenosis and Lesion Morphology as Determined by Imaging Before Atherectomy" AHA Scientific Conference on the Correlation of Clinical Syndromes of Atherosclerosis with Lesion Morphologies as seen by Pathology and Imaging Techniques, Lake Buena Vista, Florida.
- 1995 "Intravascular Ultrasound - Virtual Reality" Cardiology 1995: Concepts and Controversies, Mercy Heart Institute, Sacramento, California.
- 1995 "Re-Use of Angiographic and Interventional Catheters and Devices: Results of an Ongoing Program and Implications for Cost Effective Procedures", 2<sup>nd</sup> lecture~ "Intravascular Ultrasound to Guide Coronary Interventions: Is it Cost Effective?" 3<sup>rd</sup> lecture ~ "Current Status of Digital Standardization for Angiography Implications for the Cost of Angiographic Studies" American College of Cardiology 7<sup>th</sup> Annual Advances in Diagnostic and Therapeutic Cardiac Catheterization, Lake Buena Vista, Florida
- 1995 "Intravascular Ultrasound Imaging - Alternative Technologies: Stents/Rotational Ablation", Wessels, Arnold & Henderson Investment Conference, Scottsdale, Arizona.
- 1995 "Advances in Coronary Ultrasound Imaging", International Congress VIII on Endovascular Interventions: Breaking Barriers", The Phoenician Resort, Scottsdale, Arizona.
- 1995 Qualitative Differences between Intravascular Ultrasound and Angiography", (2<sup>nd</sup> lecture) "The Intravascular Ultrasound Study of Predictors of Restenosis" (INSPIRE TRIAL)" (3<sup>rd</sup>) "Intravascular Ultrasound/Angioscopy/ Doppler Flow Wire - Tutorial", Transcatheter Cardiovascular Therapeutics Seventh Annual Symposium, Washington Convention Center, Washington, District of Columbia.
- 1995 "Intravascular Ultrasound in Patients with Angiographically Normal Coronary Arteries" (2<sup>nd</sup> lecture) "Digital Coronary Angiography: International Standards for Archiving and Playback" (3<sup>rd</sup>) "Can Intravascular Ultrasound tell us if Bigger is better?" (4<sup>th</sup>) "Use of Intravascular Ultrasound to Improve Results of DCA and Stent Placement" Interventional Cardiology 1995, 10<sup>th</sup> Annual Demonstration Course, Miami Heart Research Institute, Snowmass, Colorado
- 1995 "Application of Intravascular Ultrasound to Rational Selection of Interventional Devices" (2<sup>nd</sup> lecture) "Physical Principles of Radiographic Imaging in the Catheterization Laboratory"

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- (3<sup>rd</sup>) "Workshop - Selection of Patients for Different Interventional Procedures" American College of Cardiology's Eleventh Annual Cardiovascular Conference, Lake Louise, Alberta, Canada.
- 1995 "Intravascular Ultrasound Insights" Myocardial Reperfusion: Concepts and Controversies, New Orleans, Louisiana.
- 1995 "Using Computers in Research" 21<sup>st</sup> Annual Symposium for Directors of Adult Cardiovascular Training Programs, American College of Cardiology 44<sup>th</sup> Annual Scientific Session, New Orleans, Louisiana
- 1995 "Intravascular Ultrasound" New Developments in Echocardiography, Mini-Course, American College of Cardiology 44<sup>th</sup> Annual Scientific Sessions, New Orleans, Louisiana
- 1995 Chairman, Fireside Panel, "Intravascular Ultrasound, Doppler and Angioscopy: What are Their Roles" American College of Cardiology 44<sup>th</sup> Annual Scientific Sessions, New Orleans, LA.
- 1995 "Clinical Management of Acute MI" 10<sup>th</sup> Annual Gabriel Sabga Cardiovascular Seminar, Elyria, Ohio
- 1995 "Clinical Applications of Intravascular Ultrasound", First International Seminar on Vascular Biology and Medicine, University of Navarra, School of Medicine, Pamplona, Spain.
- 1995 "New Frontiers in Interventional Cardiology: Coronary Intravascular Ultrasound" Fifteenth Annual Dimensions in Cardiac Critical Care Nursing Symposium, The Cleveland Clinic Foundation, Cleveland, Ohio.
- 1995 "Intracoronary Ultrasound" Cardiology Grand Rounds, Montreal Heart Institute, Montreal (Quebec), Canada.
- 1995 "Coronary Intravascular Ultrasound" Recent Advances in Interventional Cardiology, New England Deaconess Hospital, Harvard Medical School, Boston, MA.
- 1995 "Intravascular Ultrasound Assessment of the Effects of Rotational Ablation," (2<sup>nd</sup> lecture) "Clinical Utility of Coronary Intravascular Ultrasound", (3<sup>rd</sup>) "Future Developments in Intravascular Ultrasound" Symposium: Interventional Cardiology, Art or Science Royal College of Physicians, Edinburgh, Scotland, The United Kingdom
- 1995 "Insights from Intravascular Ultrasound on the Mechanism of Benefit of Rotational Ablation and Other New Revascularization Techniques. Four Seasons Hotel, Philadelphia, Pennsylvania
- 1995 "Intravascular Ultrasound: Is It the New Gold Standard?" A Rational Approach to Coronary Angioplasty, 29<sup>th</sup> Live Demonstration Course, The Andreas Gruentzig Cardiovascular Center of Emory University School of Medicine, Atlanta, Georgia.

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- 1995 "Can Newer Imaging Modalities Such as Digital Angiography and Intravascular Ultrasound Lower the Costs of Catheterization?" Interventional Cardiology, Using Technology to Maximize Benefit to Patients, Thomas Jefferson Medical College, Princeton, New Jersey
- 1995 "Insights from Intravascular Ultrasound" Restenosis Summit VII, Cleveland Clinic Foundation, Cleveland, Ohio
- 1995 "Intravascular Ultrasound: Role in Clinical Decisions/Native Coronary Atherosclerosis" American Society of Echocardiography, Annual Scientific Sessions. Toronto, Ontario, Canada
- 1995 "The Use of Intravascular Ultrasound to Optimize Outcome" Third Annual Interventional Cardiology Symposium, Seattle, Washington
- 1995 "Does Intracoronary Ultrasound Have a Clinical Role in Interventional Therapy" and "Introduction to Basic Radiation Physics for the Cardiologist" Heart House Course: Stent/Rotablator/DVI: The New Strategies for Approaching the Patient, American College of Cardiology Bethesda, Maryland
- 1995 Chairperson for Sessions: "Quantitative Coronary Angiography: Debate and Trends" and "Intracoronary Ultrasound" ~ Lectures: "Cinefilmless Imaging: Is it premature?" and "Guide-wire Based ICUS" 6<sup>th</sup> International Symposium on Quantitative Coronary Imaging, Erasmus University, Rotterdam, The Netherlands
- 1995 "What can we learn from IVUS?" Rotablator and Stenting Workshop and "Experience from the Demonstration of CD-ROM Media as a Cinefilm Replacement" XV11th Congress of European Society of Cardiology, Amsterdam, The Netherlands
- 1996 "Intravascular Ultrasound Imaging", Intravascular Ultrasound Imaging - Florida Heart Institute/Cardiovascular Research Symposium, Orlando, Florida.
- 1995 "Intravascular Ultrasound - Do the Results Justify Growing Usage?" (2<sup>nd</sup> lecture) "Toward a Cine-less Imaging and Recording" (3<sup>rd</sup>) "Value of ICUS in Stenting" Asian-Pacific Society of Interventional Cardiology in the Scientific Sessions of Asian Pacific Society of Cardiology, Bali, Indonesia
- 1995 "Intravascular Ultrasound and its Role in Treatment Strategy" Bay Area Rotablator Users Group, Heart Technology, San Francisco, California
- 1995 "The Intravascular Ultrasound Study of Predictors of Restenosis: The INSPIRE Trial" 9<sup>th</sup> Annual International Workshop on Future Directions in Interventional Cardiology, Santa Barbara, California
- 1995 "Introduction to Intravascular Echo", The Cleveland Clinic Foundation - Invasive Echocardiography - A Live Demonstration Symposium of Transesophageal, Intraoperative and Stress Echo, Cleveland, Ohio

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- 1995 "Application of Coronary Intravascular Ultrasound in the Guidance of Interventional Procedures" and "Coronary Intravascular Ultrasound" Cardiology Basic Science Conference, St. Luke's Episcopal Hospital/The Heart Institute, Houston, Texas
- 1995 "Coronary Intravascular Ultrasonography in Interventional Cardiology Practice", New Frontiers In Interventional Cardiology, Baylor University Medical Center, Dallas, Texas.
- 1995 "Coronary Intravascular Ultrasound" "Ultrasound in Balloon Angioplasty vs. Rotational Ablation", Grand Rounds - Allegheny General Hospital, Pittsburgh, Pennsylvania
- 1995 "Interventional Applications of Coronary Intravascular Ultrasound" Tokyo Live Demonstration 1995 and the 7<sup>th</sup> Cardiovascular Intervention Meeting in Japan, Tokyo, Japan
- 1995 "Intravascular Ultrasound - A Vital Part of Rational Decision making in 1995?" Symposium: Coronary Stenting in 1995, Canadian Cardiovascular Society, Toronto, Ontario, Canada
- 1995 "Intravascular Ultrasound" - 1995 Cardiovascular Global Medical Conference, Indianapolis, Indiana
- 1995 Director, Symposium: "Beyond Angiography III", Moderator, "Rationale for Intravascular Ultrasound: Limitations of Angiography in Assessing the Anatomy of Coronary Lesions" and "Intravascular Ultrasound Guidance of Rotational Ablation" Anaheim Marriott, Anaheim, California.
- 1995 "Logical and Physician Format Transport Media for the ACC, ACR and NEMA" The Society for Cardiac Angiography and Interventions symposium prior to the 68<sup>th</sup> AHA Scientific Sessions, Anaheim, California.
- 1995 "Intravascular Ultrasound Imaging of Infarct Vessels" Thrombolysis and Interventional Therapy in Acute Myocardial Infarction Symposium, The George Washington University Medical Center, Anaheim, California.
- 1995 "Emerging Technologies in Echo: Ready for Prime Time?" Symposium, American Heart Association 68<sup>th</sup> Scientific Sessions, Anaheim, California
- 1995 Moderator, "Quantitation of None-Cine Imaging for Coronary Disease" American Heart Association 68<sup>th</sup> Scientific Sessions, Anaheim, California.
- 1995 "What Intravascular Ultrasonic Imaging Has Taught Us About Coronary Disease" 23<sup>rd</sup> Annual Williamsburg Conference on Heart Disease, (American College of Cardiology, Extramural Program) Williamsburg, Virginia
- 1996 "Rotational versus Phase Array Ultrasound" Interactive Course on Intravascular Ultrasound, Montreal Heart Institute, Montreal, Canada
- 1996 "Coronary Intravascular Ultrasound", Cardiology Grand Rounds, St. Luke's Hospital, Houston, Texas

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- 1996 Intravascular Ultrasound for the Interventionalist: "Beyond Angiography: What Does IVUS Add for Interventions?" Stanford University School of Medicine, Stanford, California.
- 1996 "Optimizing Intracoronary Ultrasound" and "Is 1996 The Year To Finally Abandon Cine?" Advances in Diagnostic and Therapeutic Cardiac Catheterization, University of Florida, Orlando, Florida.
- 1996 "Coronary Intravascular Ultrasound" Cardiology Grand Rounds, Georgetown University Medical Center, Washington, District of Columbia
- 1996 "New Collaborative Relationships" American College of Cardiology Industry Forum, Heart House, Bethesda, Maryland.
- 1996 "Intravascular Ultrasound Imaging Intravascular Ultrasound", Current Trends in Interventional Cardiology, Florida Heart Institute at Florida Hospital, Orlando, Florida
- 1996 Interventional Cardiology XXX: "Can Ultrasound be used to Predict PTCA Complications?" Emory University School of Medicine, Marriott Orlando World Center, Orlando, Florida.
- 1996 "Intravascular Ultrasound: New Sights in Coronary Artery Disease" 16<sup>th</sup> Annual Dimensions in Cardiac Care, The Cleveland Clinic Foundation, Cleveland, Ohio
- 1996 "Intracoronary Ultrasound: Device Choice" and "Intracoronary Ultrasound: Transplant Assessment" Intracoronary Ultrasound Second Edinburgh Symposium, Edinburgh, Scotland.
- 1996 "Intracoronary Ultrasound: Technical Advances and Future Horizons" Duke/Stanford Interventional Fellow's Course, Durham, North Carolina.
- 1996 "Introduction to IVUS" and "Fundamentals of IVUS Image Interpretation" Intravascular Ultrasound Workshop, 6<sup>th</sup> Annual Symposium on Coronary Stenting, Scripps Clinic, San Diego, California.
- 1996 "Current Needs and Future Directions of Cardiac Imaging" International Society for Magnetic Resonance in Medicine, New York, New York
- 1996 "New Frontiers in Interventional Cardiology: Coronary Intravascular Ultrasound" Nursing Task Force of the American Heart Association, Cleveland, Ohio.
- 1996 "Intravascular Ultrasound - Is it cost effective?" The Society of Interventional Cardiology Annual Meeting, Eilat, Israel.
- 1996 "Intracoronary Ultrasound for Management of Intracoronary Thrombosis" Prevention and Management of Thrombotic Complications During Coronary Interventions, Nice, France.
- 1996 "Plaque Analysis by Intracoronary Echo" and "Intracoronary echo", Seventh International Symposium on Ischemic Heart Disease, Toledo, Spain.

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- 1996 "The Fundamentals of Intravascular Ultrasound Imaging and Image Interpretation" and "IVUS Evaluation of Rotational Ablation & Clinical Applications" The 7<sup>th</sup> Complex Coronary and Angioplasty Course, Toulouse, France
- 1996 "Limitations of Angiography and Advantages of IVUS" and "IVUS and Transplant Experience", Beyond Angiography Japan, Tokyo, Japan.
- 1996 "Intravascular Ultrasound in Acute and Other Ischemic Syndromes", Fourth Annual Pacific Northwest Cardiovascular Symposium, Seattle, Washington
- 1996 "Does intracoronary ultrasound have a clinical role in interventional therapy" and "Use and abuse of fluoroscopy: Specific hazards of interventional cardiology with respect to radiation exposure - How to protect yourself and your personnel", Stent/Rotoblator/DCA, American College of Cardiology, Heart House, Bethesda, Maryland.
- 1996 Intravascular Ultrasound in Interventional Cardiology", Interventional Cardiology Toward the New Millennium, Philadelphia, Pennsylvania and
- 1996 Intravascular Ultrasound in Interventional Cardiology", Interventional Cardiology Toward the New Millennium, Newark, New Jersey.
- 1996 "Intracoronary Imaging: How does it help?" Strategies for Intervention in Complex Coronary Artery Disease, Kansas City, Missouri
- 1996 "Intravascular Ultrasound: Do We Need It? The Basics, Clinical Role" and "Cineless lab: CD Rom", Tenth Annual International Workshop on Future Directions in Interventional Cardiology, Santa Barbara, California
- 1996 "Windows 96/The View from Intracoronary Ultrasound", New Strategies for Acute Coronary Syndromes (II) Canadian Cardiovascular Society Satellite Symposium, Montreal, Quebec
- 1996 "The Role of Intravascular Ultrasound & Angioscopy" Cardiovascular Global Medical Conference, Indianapolis, Indiana
- 1996 Director, Symposium: "Beyond Angiography IV", "Rationale for Intravascular Ultrasound: Limitations of Angiography in Assessing Coronary Lesional Anatomy" and "Serial Ultrasound Guidance of Directional Coronary Atherectomy: Value and Limitations" New Orleans Marriott, New Orleans, Louisiana
- 1996 Moderator Intracoronary Ultrasound - Technical Considerations - Ernest N. Morial Convention Center, New Orleans, Louisiana
- 1996 "Intravascular Ultrasound Assessment of Coronary Artery Tapering" Symposium, American Heart Association 69<sup>th</sup> Scientific Sessions, New Orleans, Louisiana
- 1996 "The Role of Intravascular Ultrasound during Interventional Procedures" The New Jersey Society of Interventional Cardiology, Newark, New Jersey

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- 1997 "Intravascular Ultrasound (IVUS) When is it Really Useful", William Beaumont Hospital Cardiology Grand Rounds, Royal Oak, Michigan
- 1997 "Coronary Intravascular Ultrasound" University of Southern California Grand Rounds, Los Angeles, California.
- 1997 "IVUS vs Angiography", Applied Intravascular Ultrasound for the Interventionalist, Sheraton Palace Hotel, San Francisco, California.
- 1997 "Limitations of Coronary Angiography: Insight from Intravascular Ultrasound" and "Application of Intravascular Ultrasound in Interventional Cardiology", 24<sup>th</sup> Annual Scientific meeting of the Egyptian Society of Cardiology, Cairo, Egypt.
- 1997 "Coronary Intravascular Ultrasound", Brigham and Women's Hospital Grand Rounds, Boston, Massachusetts.
- 1997 "A Physician's Perspective on the Development of DICOM Standard", The American Academy of Medical Administrators, Irvine, California
- 1997 "Intravascular Ultrasound", 46<sup>th</sup> Annual Scientific Session of the American College of Cardiology, Anaheim, California.
- 1997 "Drug Therapy and Pathology for Acute Coronary Syndrome" - "Evaluation of Atherosclerotic Wall Morphology by Intravascular Ultrasound" and "A Preoccupation with Coronary Luminology", 61<sup>st</sup> Annual Scientific Meeting of Japanese Circulation Society, Tokyo, Japan.
- 1997 Cineless Catheterization Lab Imaging: The Current Perspective and Future Directions: "IVUS Predictors of Target Vessel Revascularization following Coronary Stenting" Coronary Stenting 97, Monash Medical Center, Melbourne Australia.
- 1997 "Imaging Assessment of Cardiovascular Disease", The Graduate Hospital, Philadelphia, Pennsylvania
- 1997 "Coronary Intravascular Ultrasound", The Identification of the Vulnerable Plaque Symposium, New York, New York.
- 1997 "Current Trends in Intravascular Cardiac Ultrasound" Judkins Symposium: Society for Cardiac Angiography and Intervention: Annual Scientific Sessions, Scottsdale, Arizona.
- 1997 "IVUS in Day-to-Day Practice" and "Cineless Cardiology: Practical Reality" Endovascular Therapy Course, Paris, France
- 1997 "Intravascular Ultrasound" University of Pennsylvania Medical Center Grand Rounds, Philadelphia, Pennsylvania
- 1997 "Intracoronary Ultrasound" Harper Hospital, Detroit, Michigan



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- 1997 "Coronary Intravascular Ultrasound: Clinical Applications" Microscopy & Microanalysis 1997, Cleveland, Ohio
- 1997 "Beyond Angiography - IVUS, Angioscopy, Doppler Wire)", "Angioscopy, Intravascular Ultrasound and Doppler Wire" and "Endovascular images of the Restenosis" II Meeting of the Latin American Society for Interventional Cardiology, Buenos Aires, Argentina
- 1997 Coronary Intravascular Ultrasound: Choosing the Correct Intervention", Shadyside Hospital, Pittsburgh, Pennsylvania
- 1997 "Enhanced Diagnostic Precision is Cost-Effective: Arguments for IVUS-guided Coronary Intervention" and "IVUS and Other Adjunct Imaging Modalities", Transcatheter Cardiovascular Therapeutics, Washington District of Columbia
- 1997 "Angiography is the Gold Standard for the Diagnosis and Treatment of Coronary Artery Disease", New Jersey Chapter of the American College of Cardiology, Princeton, New Jersey
- 1997 Moderator "Intravascular Ultrasound" How-to-Session, 70<sup>th</sup> Scientific Sessions, Orange County Convention Center, Orlando, Florida
- 1997 "Intravascular Ultrasound in the Evaluation of Lesions and Guidance of Therapy", New York Cardiovascular Symposium, New York, New York
- 1998 "Our Preoccupation with Coronary Luminology" Grand Rounds University of California, San Diego, California
- 1998 "Application of Intravascular Ultrasound in Guidance of Coronary Intervention", "Intravascular Ultrasound in the Detection and Quantification of Coronary Atherosclerosis" and "Cardiogenic Shock: Pathophysiology Management and the case for Urgent Revascularization", New Frontiers in Interventional and Clinical Cardiology, Mumbai, India.
- 1998 Demonstration Course: "Comparison of Intravascular Ultrasound and Angiography" Intravascular Ultrasound for the Interventionist, Washington, District of Columbia.
- 1998 "DICOM Standard" Tremblant Interventional Cardiology, Quebec, Canada
- 1998 "Intravascular Ultrasound: What Can It Tell Us, When Should we Use it" and "Angioplasty Without Cine Film: The DICOM Standard" Cardiovascular Conference at Snowbird, Snowbird, Utah.
- 1998 "Update On New Imaging Techniques: IVUS, MR, OCT," 10<sup>th</sup> Annual Advances in Diagnostic and Therapeutic Cardiac Catheterization, Lake Buena Vista, Florida.
- 1998 "Intravascular Ultrasound Guided Transcatheter Therapy: Is It Mature Yet" Cardiovascular Interventions' 98, Tampa, Florida.
- 1998 "Our Preoccupation with Coronary Luminology" Turkish Heart Foundation, Istanbul, Turkey

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- 1998 "Intravascular Ultrasound: Present Clinical Utility and Future Prospects", "Why do we need Intravascular Ultrasound" and "The DICOM Standard: Where is it now" The 47<sup>th</sup> Scientific Session of the American College of Cardiology, Atlanta, Georgia.
- 1998 "Beyond Angiography: The Rationale for Intravascular Ultrasound Imaging", Beyond Angiography, Asan Medical Center, Seoul, Korea.
- 1998 "IVUS Workshop: Complex Coronary and Vascular Interventions" Stanford University Medical Center, Stanford, California.
- 1998 "The DICOM Project: U.S. & European Results" and "Future Digital Media for Exchange" Society for Cardiac Angiography, Montreal, Quebec.
- 1998 "IVUS Guidance for Stent Placement: Necessary or Extravagance" Advanced Cardiovascular Guidance, Atlanta, Georgia.
- 1998 "Our Preoccupation with Luminology" Case Western Reserve University, Cleveland, Ohio
- 1998 "Plaque Characteristics from IVUS findings", XIII Practical Course in Interventional Cardiology, Madrid, Spain.
- 1998 "Use and Abuse of IVUS" and "How will the Cardiology Service be in the XXI Century", New Frontiers in Cardiology, Bogota, Columbia.
- 1999 "IVUS – Questions and Answers, 22<sup>nd</sup> Annual Cardiovascular Symposium, North Ridge Heart Institute, Fort Lauderdale, Florida.
- 1999 "PREVENT Study" New Standards in Dyslipidemia Therapy: Extending the Benefit, Cancun Mexico.
- 1999 "Our Preoccupation with Coronary Luminology" – The 5<sup>th</sup> Annual Cardiology Symposium in San Fernando Valley Heart Institute, Woodland Hills, California.
- 1999 "Plaque Vulnerability Regression and Stabilization: IVUS Insights" 5<sup>th</sup> Annual Cardiology Symposium, San Fernando Valley Heart Institute, Woodland Hills, California.
- 1999 "Anatomic lesion assessment (IVUS) is better" and "IVUS reduces restenosis (AVID/CRUISE) Cardiovascular Interventions 99" Tampa Convention Center, Tampa, Florida.
- 1999 "New Imaging Techniques: Focus on Intravascular Ultrasound and Coronary Artery Disease" 48<sup>th</sup> Annual Scientific Session on The American College of Cardiology, New Orleans, Louisiana.
- 1999 "The Use of Troponin in the Chronic Renal Failure Patient" - The 48<sup>th</sup> Annual Scientific Session of the American College of Cardiology, New Orleans, Louisiana

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- 1999 “Anatomical Decompensation” Myocardial Reprefusion Symposium, 48<sup>th</sup> Annual Scientific Session of The American College of Cardiology, New Orleans, Louisiana.
- 1999 “Intravascular Ultrasound” Morial Convention Center, 48<sup>th</sup> Annual Scientific Session of The American College of Cardiology, New Orleans, Louisiana.
- 1999 “Coronary Artery Disease: New Thinking in Plaque and Regression, Cardiac Nursing Symposium, Cleveland, Ohio.
- 1999 “Intravascular Ultrasound and Angiography: Exploring Therapeutic Options”, New Insights In Lipid Management: Focus on Atorvastatin, Orlando Florida.
- 1999 “Intervention: How to decide the endpoint and its usefulness – IVUS Guided Intervention: Stenting”, “Arteriosclerosis – Progression/Regression” and “Perspective: Future of IVUS, Flow and Pressure”, Beyond Angiography Japan, Tokyo, Japan.
- 1999 “Intra-Vascular Ultrasound and Angiography: Exploring Therapeutic Options” New Insights in Lipid Management: Focus on Atorvastatin, Los Angeles, California.
- 1999 Co-Chairman, “National Cardiology Advisory Board Meeting” Loews Miami Beach Hotel, South Beach, Florida.
- 1999 “New Imaging Techniques: A Focus on Intravascular Ultrasound and Coronary Artery Disease” European Atherosclerosis Society, Athens, Greece.
- 1999 “Intravascular Ultrasound and Angioplasty: Exploring Therapeutic Options” Vascular Biology Working Group, Orlando, Florida.
- 1999 “The Use of Intravascular Ultrasound to Detect Lipid Abnormalities” Lipid Speakers Bureau Loews Santa Monica Beach Hotel, Santa Monica, California.
- 1999 “New Perspectives in the Management of CAD: Can We Impact Disease Progression?”, European Society of Cardiology Symposium, Barcelona Spain.
- 1999 “Current Management of Unstable Ischemia”, Board Review Program of the American College of Cardiology and Society for Cardiovascular Angiography and Interventions, San Francisco, California.
- 1999 “New Imaging Techniques: Focus on Intravascular Ultrasound and Coronary Artery Disease”, The 1<sup>st</sup> Annual GTACC Fall Retreat, Toronto, Ontario, Canada.
- 1999 “Innovative Imaging Techniques to Guide Treatment”, Dynamic Paradigms in Heart Failure, San Francisco, California.
- 1999 “Intravascular Ultrasound and Angiography: Exploring Therapeutic Options” Lipitor Speakers Bureau Orientation Meeting, LaJolla, California

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- 1999 "The Benefits of Lowering LDL-C with Statins" and "LDL-C and Cardiovascular Disease: The Facts and the Future", Multiple Risk Factors in Cardiovascular Disease: Global Assessment and Intervention, Venice, Italy
- 1999 "Limitations of Coronary Angiography: Fundamentals of IVUS Comparative Lesion Morphology" ACC/SCAI Board Review program, Atlanta, Georgia.
- 1999 "Intravascular Ultrasound Assessment of Atherosclerosis Regression-Progression and Plaque Vulnerability" American Heart Association, Beyond Angiography, Atlanta, Georgia
- 1999 "What will new Imaging Techniques teach us about Atherogenesis and its Complications" Lipid Management on the Edge of a New Millennium Symposium, Atlanta, Georgia
- 1999 "The Vulnerable Plaque – 1999 Update "Evaluation by Intravascular Ultrasound" Georgia World Congress Center Auditorium, American Heart Association, Atlanta, Georgia
- 1999 "Coronary Intravascular Ultrasound" Percutaneous Vascular Interventions Symposium, Baylor University, Houston, Texas
- 2000 "IVUS: An Imaging Technology that Guides device Selection, Stent Sizing and Expansion." Southwest Percutaneous Vascular Intervention Meeting (SPVI.-II), Baylor University, Houston, Texas, (January 2000).
- 2000 Insights into the Atherosclerotic Disease Process from Coronary Intravascular Ultrasound, Cardiovascular Consultants' Meeting in New Orleans (January, 2000)
- 2000 "Coronary Intravascular Ultrasound Assessment of Atherosclerosis Regression-Progression Cardiology" Grand Rounds, St. Luke's-Roosevelt Hospital Center,
- 2000 "Insights into Atherosclerosis Disease from Coronary Intravascular Ultrasound" Interventional Cardiology Consultants Meeting, Tucson Arizona (January 24, 2000).
- 2000 "Atherosclerosis: Regression and Progression", Grand Rounds University of Pittsburgh Medical Center, St. Francis Medical Center, Pittsburgh, Pennsylvania, January 25, 2000.
- 2000 "Advances in Lipid Therapy" Wake Forest School of Medicine, Winston-Salem, North Carolina, February 9, 2000
- 2000 "Practical Approach to the Treatment of Lipids" University of North Carolina, Chapel Hill, North Carolina, February 9, 2000.
- 2000 "Our Preoccupation with Coronary Luminology" Grand Rounds Cedars-Sinai Medical Center, Los Angeles, California February 15, 2000
- 2000 "Coronary Intravascular Ultrasound Assessment of Atherosclerosis Regression-Progression" Beverly Hills Hilton California, February 13, 2000.

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- 2000 "Understanding Atherosclerotic Progression and Regression: IVUS as a Diagnostic Tool" The Future of Lipid Management: Early Intervention with Aggressive Treatment, March 3-5, 2000, New York, New York.
- 2000 "Atherogenesis and Its Complications: Are the Current Imaging Techniques Adequate?" Medical vs. Interventional Approaches to the Management of Coronary Artery Disease, Program Co-Chairman, American College of Cardiology, Anaheim, California March 11, 2000.
- 2000 Beyond Angiography Program Co-Chairman and Lecturer: "Intravascular Ultrasound Assessment of Atherosclerosis Regression-Progression" American College of Cardiology Satellite Symposium, Anaheim, California, March 2000.
- 2000 "Atherosclerosis: Intravascular Ultrasound Insights" Grand Rounds Smith-Kline Beecham, Philadelphia, Pennsylvania, March 20, 2000,
- 2000 "IVUS in the Year 2000: Old Concepts and New Applications" Beyond Angiography Japan, Japanese Circulation Society. Senri Life Science Center. Osaka, Japan March 31, 2000
- 2000 "Coronary Artery Disease: From Onset to Clinical Symptoms" Summit on Cardiovascular Risk Management, Western Working Group, Deer Valley, Utah April 15, 2000
- 2000 "IVUS: The Rationale for Aggressive Intervention" Atorvastatin Global Investigators, Chicago, Illinois May 4, 2000
- 2000 "Atherosclerosis: It is Where You Least Suspect It" Second Annual Healthcare Symposium: New and Emerging Drugs and Devices to Battle Cardiovascular Disease, JP Morgan Securities, New York, New York April 25, 2000
- 2000 "Atherosclerosis Regression-Progression: Insights from Intravascular Ultrasound" Cardiology Update 2000 Cardiovascular Disease: A Patient Management Approach, University of Pennsylvania Symposium Atlantic City, New Jersey, May 7, 2000
- 2000 "Atherosclerosis Regression-Progression: An Intravascular Ultrasound Perspective" New Concepts in Diabetes Management. Northwestern University Medical School, Chicago, Illinois May 20, 2000
- 2000 "Intravascular Ultrasound and Coronary Artery Disease" Coronary Artery Disease: From Managing Risk Factors to Treating Complications, Royal College of Physicians, London, United Kingdom June 3, 2000
- 2000 "Coronary Intravascular Ultrasound: Diagnostic Application in CHD and Comparison with Angiography" Treating the Diabetic Patient at Risk: Atherosclerosis Prevention Through Aggressive Lipid Lowering, American Diabetes Association San Antonio, Texas, June 11, 2000

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- 2000 "Risk Factor Management" – Core Slide Presentation- Evolving Insights into Coronary Artery Disease: A New View to Managing Risk Symposium, Toronto, Ontario, Canada July 28, 2000
- 2000 "Use of Statins in Unstable Coronary Syndromes" The CAD Continuum: From Risk to Therapeutic Intervention, Stockholm XIIth International Symposium on Atherosclerosis, Sweden, June 26, 2000
- 2000 "Wise IVUS Training" meeting sponsored by the University of Florida, Atlanta Georgia August 18, 2000
- 2000 "The Latest Study of Brain, Heart and Kidney" Japan /US Symposium, Cleveland Clinic Foundation, Cleveland Ohio August 19, 2000
- 2000 "Atherosclerosis" - The Artery Wall: Structure and Function, Satellite Symposium sponsored University of Minnesota Chicago Illinois, August 25, 2000.
- 2000 Assessing Coronary Artery Disease: The Role of New Imaging Techniques" Satellite Symposium during European Society of Cardiology, Amsterdam, The Netherlands August 26, 2000
- 2000 Chairman- XXII Int'l Congress of the European Society of Cardiology opening session, Amsterdam, The Netherlands, August 29, 2000.
- 2000 "New Insights into the Nature of Coronary Artery Disease: The Inside View" Changing Perspectives in Lipid Lowering – Symposium, The XXII Congress of the European Society of Cardiology, Amsterdam, The Netherlands – August 26-30, 2000.
- 2000 "Intravascular Ultrasound Assessing and Modifying the Vulnerable Atherosclerotic Plaque" AHA Scientific Conference, New York New York, September 16, 2000.
- 2000 "Intravascular Ultrasound Assessment of Arteriosclerosis: Progression and Regression" University of Colorado, Grand Rounds. Denver, Colorado September 24, 2000
- 2000 "IVUS Present and Future Role in Cardiovascular Intervention" Denver Interventional Society, Denver Colorado, September 27, 2000.
- 2000 "How to Be a Clinical Cardiovascular Investigator" Faculty on ACC/AHA Heart House Program, Bethesda, Maryland, September 8 & 9, 2000.
- 2000 "Intravascular Ultrasound Assessment of Arteriosclerosis: Progression and Regression" Hartford Hospital 16<sup>th</sup> Annual Cardiovascular Symposium, Hartford Connecticut, October 3, 2000
- 2000 "Acute vs. Chronic CAD Syndromes – Is there a Difference? The View from the Inside" ACC Colloquium on Cardiovascular Therapy, Santa Fe New Mexico, October 5, 2000.

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- 2000 "Direct Imaging of Coronary Plaque: IVUS" National Summit on Atherosclerosis Symposium, New York New York, October 7, 2000.
- 2000 "Using IVUS for Insights into the Treatment of the Multiple Risk Factor Patient" The Future of Lipid Management: Early Intervention with Aggressive Treatment Symposium - Lipitor National Speakers Bureau, New York New York, October 2000.
- 2000 "When Should Revascularization be performed?" American Diabetes Association Symposium, Cleveland, Ohio, October 21, 2000.
- 2000 "New Imaging Techniques: Focus on Intravascular Ultrasound and Coronary Artery Disease" Second Annual Kaiser Permanente Symposium, Monterey, California, October 28, 2000.
- 2000 "Identifying and Assessing Patients at Risk for Coronary Heart Disease" Symposium at American Osteopathic Association Annual Meeting, Orlando, Florida, October 29, 2000.
- 2000 "When and how Should We Begin Assessing Risk in our Patients" Advances in Lipid Management: Examining the Evidence - Expert Insights Panel, American Heart Association Scientific Session, New Orleans, Louisiana. November 11, 2000.
- 2000 "Evolving Insights into CAD: A New View to Managing Risk" PREVENT CAD Consultants Symposium, AHA Scientific Session, New Orleans, Louisiana November 12, 2000.
- 2000 "New Imaging Techniques in CAD" Atherosclerosis: New Concepts in Pathophysiology, Risk Factor Management and CV Protection, University of Florida Symposium, AHA Scientific Session, New Orleans, Louisiana, November 14, 2000.
- 2000 "How to Assess Atherosclerosis Progression/Regression in Clinical Trials, Quantitative Angiography, Echocardiography, Intravascular Ultrasound and MRI" Advance Drug Research Conference, Cannes ~ France, December 4, 2000.
- 2000 "Atherosclerosis Progression and Ischemic Events Prevention with Calcium Antagonists" Advance Drug Research Conference, Cannes, France December 4, 2000.
- 2000 "New Insights Into the Atherosclerotic Disease Process from Intravascular Ultrasound", "Assessment of Atherosclerosis Regression and Progression Using IVUS" and "IVUS of Characterization of Plaque Rupture" ACC 28th Williamsburg Conference on Heart Disease, Williamsburg Virginia December 6, 2000.
- 2000 "Intravascular Ultrasound Assessment of Coronary Artery Disease", University of Indiana, Krannert Institute Research Conference. December 18, 2000.
- 2001 "Imaging of Atherosclerosis & Its Syndromes" Merck Consultants Meeting, New York City January 6, 2001.

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- 2001 "Synergy Between Invasive and Non-Invasive Strategies for Management of Coronary Disease" National Lipid Education Annual Update Meeting, Tucson, Arizona January 20, 2001.
- 2001 "Coronary Intravascular Ultrasound in the New Millenium: An Evidence Based Approach" 3<sup>rd</sup> Annual Southwest Percutaneous Vascular Intervention Symposium, Baylor College Houston, Texas, January 27, 2001.
- 2001 Use and Limitations of IVUS to Identifiy the Unstable Plaque, Society of Atherosclerosis Imaging First International Meeting, Tulane University Medical Center, New Orleans Louisiana February 3, 2001.
- 2001 "Atherosclerosis: Intervention to Prevention" Evolving Atherosclerosis Management Symposium, Washington, District of Columbia February 7, 2001.
- 2001 "Coronary Disease, Plaque Rupture and Interventions: The Inside View" Interventions in Cardiology Study Group National Faculty Update Conference, St. Petersburg, Florida March 3, 2001.
- 2001 IVUS: Insights into Plaque Vulnerability & Rupture" ACC Management of Acute Coronary Syndromes Satellite Symposium, Lake Louise, Alberta, Canada March 4, 2001.
- 2001 "Intravascular Ultrasound Assessment of Atherosclerotic Growth and Regression" ACC 17<sup>th</sup> Annual Cardiovascular Conference, Lake Louise, Alberta, Canada, March 5, 2001.
- 2001 "New Insights into the Atherosclerotic Disease Process from Intravascular Ultrasound" Annual Conference of South African Cardiologist, Johannesburg, South Africa March 10, 2001.
- 2001 "Use of IVUS in Measuring Plaque Burden" Educational Meeting held prior to the ACC 2001 Annual Scientific Session, Orlando, Florida March 16, 2001.
- 2001 "Plaque Fissuring, Erosion or Eruption: What Decides" Myocardial Reperfusion XIV: Concept & Controversies program preceeding the ACC 2001 Annual Scientific Session, Orlando, Florida March 17, 2001.
- 2001 "Atherosclerosis: Who is At Risk?" Treatment of CVD: Heart Failure & Lipid Disturbance Management program preceeding the ACC 2001 Annual Scientific Session, Orlando, Florida, March 17, 2001.
- 2001 "Medical Management Should be Considered First in Patients with Ischemic Heart Disease" ACC Annual Scientific Session, Orlando, Florida, March 18, 2001.



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- 2001 "New Directions in Catheter-Based Imaging" ACC Annual Scientific Session, Orlando, Florida, March 18, 2001.
- 2001 "Controversies in Cardiology II" Moderator of Session, ACC Annual Scientific Session, Orlando, Florida, March 19, 2001.
- 2001 "Vulnerable Plaque – Diagnosis & Treatment" Current Topics Session of Beyond Angiography Japan Conference, Osaka, Japan, March 24, 2001.
- 2001 "Current State of Lipid-Lowering Therapies" CCF Dimensions in Cardiac Care, Cleveland, Ohio, April 2, 2001.
- 2001 "Assessment of Atherosclerosis: Progression/Regression Using IVUS" American Association of Clinical Endocrinologists 10<sup>th</sup> Annual Meeting & Clinical Congress, San Antonio Texas, May 4, 2001.
- 2001 "The Progression and Regression of Coronary Artery Disease – An Incredible Story Told by IVUS" Oklahoma Heart Research & Education Foundation, Tulsa Oklahoma, May 4, 2001.
- 2001 "Review of Imaging Techniques in Coronary Artery Disease" Ohio State Medical Association & Firelands Regional Health System Sandusky Ohio May 9, 2001.
- 2001 "Insights into the Atherosclerotic Disease Process from Intravascular Ultrasound" Keynote Address Borgess Heart Institute Cardiovascular symposium, Kalamazoo Michigan, May 11, 2001.
- 2001 "Contemporary Views on Diagnosis and Treatment of Coronary Artery Disease: Applications in Clinical Practice" American Geriatric Society Annual Meeting, Chicago Illinois, May 12, 2001.
- 2001 "How Do We Quantify Coronary Artery Disease and Monitor its Progression?" 72<sup>nd</sup> Congress of European Atherosclerosis Society, Glasgow Scotland May 21, 2001.
- 2001 "New Insights for Future Treatment" British Cardiac Society Annual Conference Satellite Symposium, Manchester London, May 21, 2001.
- 2001 "Closer Look at Normal Coronary Arteries" and Co-Chairman of British Cardiac Society Annual Conference New Topic Session, Manchester London, May 22, 2001.
- 2001 "Insights into the Atherosclerotic Disease Process from Intravascular Ultrasound" Heart Center Grand Rounds, Cleveland Clinic Foundation, Cleveland Ohio, May 30, 2001.

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- 2001 "Development of Coronary Atherosclerosis: The Inside View" ACTION (A Coronary Disease Trial Investigating Outcome with Nifedipine) Investigators Meeting, Barcelona Spain, June 3, 2001.
- 2001 "Reconciling the Goals of Multiple Guidelines: The Need for a Coherent Management Strategy" and Chairman of the American Diabetes Association Scientific Program, Philadelphia Pennsylvania, June 24, 2001.
- 2001 "Imaging Subclinical CVD/Imaging Monitoring" Emerging Science of Lipid Management National Meeting, New York City New York, July 3, 2001.
- 2001 "Acute Coronary Syndromes in Women" American Medical Women's Association (AMWA) Advanced Curriculum on Women's Health 2<sup>nd</sup> International Conference, Cleveland Ohio, August 3, 2001.
- 2001 "The Role of Intravascular Ultrasound" University Munster Germany International Task Force for Prevention of Coronary Heart Disease, New York City New York, September 8, 2001.
- 2001 "Imaging Plaque Changes: Implications for Treatment" Atherosclerosis Summit, New York City New York, September 8, 2001.
- 2001 "What is the Range of Current Treatments", 2<sup>nd</sup> lecture "Invasive & Noninvasive Measurement of Atherosclerosis" and Chairman XIV International Symposium on Drugs Affecting Lipid Metabolism (DALM) New York City, New York, September 9, 2001.
- 2001 "IVUS Insights into the Atherosclerotic Disease Process" and Keynote Lecture "Future of the Diagnosis of Unstable Plaque" 49th Annual Meeting of the Japanese College of Cardiology, Hiroshima Japan, September 25, 2001.
- 2001 "The Vital Statistics Emerge" Cardiology Board Review Course Plenary Lecture ACC/AHA Guidelines, Cleveland Clinic Foundation, Cleveland Ohio October 7, 2001.
- 2001 "The Vulnerable Plaque: What Have We Learned from IVUS" Canadian Cardiovascular Society Annual Meeting Satellite Symposium, Halifax - Nova Scotia, Canada, October 21, 2001.
- 2001 "New Insights into the Atherosclerotic Disease Process" Syndrome X Diabetes Hypertension & The Heart Symposium, Woodland Hills California, October 27, 2001.
- 2001 "Dyslipidemia and the Unstable Plaque and Atherosclerotic Plaque Syndrome" Fourth Annual Lipids in the Desert Program, Tucson Arizona, November 3, 2001.
- 2001 "IVUS and CAD" American College of Cardiology SCA&I Board Review Program in Interventional Cardiology, Atlanta Georgia, October 19, 2001.

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- 2001 "What Do I Need to Know to do Patient Oriented Research/IRB" Early Career Development Program at the American Heart Association Annual Scientific Session, Anaheim California, November 10, 2001.
- 2001 "Intravascular Ultrasound" Imaging of Atherosclerosis in Humans: Research & Clinical Implications program at the American Heart Association Scientific Session, Anaheim California, November 11, 2001.
- 2001 "Pathogenesis of Type 2 Diabetes: Links to Atherosclerosis" National Diabetes Education Initiative program during AHA, Anaheim California, November 11, 2001.
- 2001 "Double Trouble shooting for the Failing Heart" and "Sooner or Later" Controversies in Cardiology: The Clinics' Approach, Cleveland Clinic and Mayo Clinic program during AHA, Anaheim California, November 12, 2001.
- 2001 "IVUS" American College of Cardiology and Pfizer Academic Visiting Professor program in Cardiovascular Medicine, New York, New York, December 2001.
- 2001 "Unstable Plaque" The Association of Lipid & Atherosclerosis Researchers of Michigan Annual Meeting, Dearborn, Michigan, December 2001.
- 2002 "A Close Look in the Coronaries: Is Young Really Old?" UCLA School of Medicine program Diabetes and Aging: Are They a Necessity? January, Los Angeles, California
- 2002 "What is the Best Way to Assess CV Risk? "Carotid Ultrasonography" American College of Cardiology 51<sup>st</sup> Annual Scientific Session, March 17, 2002, Atlanta GA.
- 2002 "Diabetes is a Cardiovascular Disease" "IVUS Detection of Advanced Atherosclerosis in Diabetic Patients" American College of Cardiology, 51st Annual Scientific Session, March 18, 2002, Atlanta GA.
- 2002 "Vascular Benefits of Aggressive Lipid Lowering Therapy" Luncheon Panel American College of Cardiology 51<sup>st</sup> Annual Scientific Session, March 19, 2002, Atlanta, GA.
- 2002 "Controversies in Cardiology II" "I HOPE Routine ACEI Treatment for Coronary Heart Disease Patients Is Beneficial, but Its Role is Not Yet Established" –Protagonist, American College of Cardiology 51<sup>st</sup> Annual Scientific Session, March 18, 2002, Atlanta GA.
- 2002 "Emerging Imaging Techniques to Detect and Quantify Atherosclerosis" Plenary Symposium: Co-Chairman/Lecturer, "Intravascular Ultrasound" American College of Cardiology 51<sup>st</sup> Annual Scientific Session, March 18, 2002, Atlanta, GA.

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- 2002 Plenary Symposium Identifying & the Treatment of Vulnerable Plaque Lecture: "Identification by IVUS" American College of Cardiology, 51<sup>st</sup> Annual Scientific Session, March 19, 2002, Atlanta GA.
- 2002 "Insights from Coronary Ultrasound" Mercy Heart Institute's 12<sup>th</sup> Annual Cardiology Symposium "Cardiology 2002: Concepts in Controversies" April 6, 2002, Sacramento CA.
- 2002 "The Use of IVUS in Coronary Artery Disease" Department of Medicine at Columbia Presbyterian Medical Center's Preventive Cardiology Update 2002 program at Columbia University College of Physicians & Surgeons,
- 2002 "Imaging of Coronary Arteries: Intravascular Ultrasound" American College of Cardiology and World Congress of Cardiology Joint Symposium 2002, May 6, 2002 Sydney Australia.
- 2002 Emerging Technologies in Coronary Artery Disease Assessment" 2002 Medical Directors Colloquy "Transforming Dyslipidemia Management", May 18, 2002, Tucson AZ
- 2002 "Identifying Patients at Risk: Novel Diagnostic Techniques" Assessment and Treatment of Global CHD Risk program, Pfizer Global Investigators Meeting, April 29, 2002, Paris France.
- 2002 "Targeting and Treating the Vulnerable Plaque: New Technologies for the Interventional Cardiologist", 11<sup>th</sup> Annual Advanced CV Interventions Symposium, June 19, 2002, Hilton Head, South Carolina,
- 2002 "IVUS in the Assessment and Management of Atherosclerosis" The Queen's Heart Institute Distinguished Speaker Series, June 21, 2002 Honolulu, Hawaii.
- 2002 "Atherosclerosis: When Does it Start and How Does it Progress? Symposium: The New View of Atherosclerosis" 73<sup>rd</sup> European Atherosclerosis Society, July 7, 2002, Salzburg, Austria.

## BIBLIOGRAPHY

### Book Chapters

1. **Nissen SE**, Elion JL, DeMaria AN: Value and Limitations of Densitometry in the Calculation of Right and Left Ventricular Ejection Fraction from Digital Angiography. In: GBJ Mancini, ed. *Clinical Cardiac Applications in Digital Angiography*, Raven Press, New York, New York, pages 115-130, 1988.
2. Grayburn PA, **Nissen SE**: Quantitative Assessment of Aortic Regurgitation by Digital Subtraction Angiography. In: Heintzen P, Bursch JH, eds. *Progress in Digital Angiography*, Kluwer Academic Publisher, The Netherlands, pages 63-69, 1988.

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